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CLINICAL LECTURES.

CHOREA OF ADULTS.—VIOLENT LEAD POISONING—PNEUMONIA OF DRUNKARDS.[1]

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Gentlemen: The first case which I show you to-day is one which is both etiologically and therapeutically of very considerable interest. It is a case the history of which is as follows. The patient is a colored man, thirty-nine years old, a barber by occupation. His father died of heart disease; his mother and sister were affected with chorea, developed after they had reached adult age. His mother's chorea lasted for twenty years, and she eventually died from the effects of the disease, as did also his sister. The patient's attack came on after his thirtieth year. His case belongs, therefore, to the group of adult choreas. As far as we can ascertain there is no history of rheumatism in his family, nor has he ever had rheumatism. The patient has always been healthy until seven years ago, when he began to have choreic attacks without any appreciable cause. Without any history of injury, fright or rheumatism, he gradually became affected with these violent choreic movements, which have been increasing in intensity, and on his admission to the hospital were so violent that he was confined to his bed, where he remained until the first of this month. These movements ceased at night, and sleep was undisturbed. In this respect his case resembles that of his mother and of his sister.

Now, let us examine the patient's heart to see if his disease is in any way connected with a cardiac lesion. The movements are so violent, the chest even constantly moving, that it is very difficult to analyze the cardiac sounds with accuracy; but by taking time, I am able to tell positively that there is no cardiac disease here. The first sound is a little heavier than normal, and the second is distinct, but there is no murmur present. The urine is normal. The temperature has been rather sub-normal, never exceeding 98°, and at one time falling to 97°. He has no headache; and no cerebral symptoms beyond an occasional slight giddiness. His tongue is clean, and there are no digestive symptoms. The pupils are of moderate size and react to light.

This patient is a striking illustration of that comparatively rare disease, hereditary chorea of adults, an affection which is a very much more severe disease than is the chorea of children. The fact that it usually does not occur until adult age, and that it appears without any cause and as the result of an hereditary influence, gives rise to an unfavorable prognosis, one far less favorable than in the ordinary chorea of childhood and adolescence. Also we do not see in these cases the relapses or ameliorations which occur in ordinary chorea. Here the disease is continuous. The patient is never free from the disease. There are, it is true, exacerbations in this man's condition, occurring about once a month without apparent cause. We may look upon this disorder as one of those strange neurotic affections which may be likened to other hereditary nervous diseases, such as hereditary epilepsy, hereditary ataxia or Friedreich's disease, which also occur in family groups. Most likely the hereditary weakness lies in some of the nervous motor centres in the brain, but this is not positively known.

Now, as regards treatment. This man has improved under the use of Fowler's solution, nine drops daily. But when I came on duty, I placed him on what has done him yet more good, namely, the one two-hundreth of a grain of the hydrobromate of hyoscin, three times a day. This is a de-

[1] Delivered at the Pennsylvania Hospital.

cided dose. Hyoscin is a very active agent, and I have seen toxic effects arising from the one two-hundreth of a grain. It benefited the patient much, and it is therefore incumbent upon us to continue the treatment. We will give him larger doses now, the one one-hundred-and-fiftieth of a grain three times a day. If this should not succeed, I shall try hyoscyamin, from which also I have seen excellent results. It is a kindred remedy to hyoscin, and both produce excellent results in instances of long-standing chorea. Should this fail, remembering a very violent case of long-standing chorea in a young adult in the ward, I should place the patient on belladonna, pushed until its toxic effects are produced, or chloral, keeping the patient under its influence, even half drowsy, all of the time. Considering the obstinate character of these hereditary choreas, I fear we shall have an extended opportunity to test these drugs. Along with them, we shall give a nourishing diet, and insist on his having an out-door life.

Lead Poisoning.

Here is a case of violent lead poisoning, in a man twenty-nine years old. He has been working in lead works during the last four months to within four days of his admission, on the third of this month. About a month ago he noticed a sweetish taste in his mouth, and about two weeks ago a blue line on his gums. At times he has had pain in his back, legs, arms and abdomen, and for the last ten days he has had wrist-drop. It is truly a classical case of lead poisoning. During the last seven days the pain in his abdomen has become very intense. It is referred to the umbilicus, and is twisting in character. His bowels are very constipated, his abdomen is scaphoid and sensitive to the touch. The urine is non-albuminous. His tongue is heavily furred, and salivation is profuse. He was placed on ten grains of iodide of potassium three times a day, and sulphate of magnesia to keep his bowels open. On the fifth of November he began to vomit, and his bowels on that day were copiously moved. On the eighth, he suffered intense pain and was given an hypodermic of morphine and atropine to control it, and, for his sick stomach and colic, tincture of cannabis indica, ten drops three times a day. A quarter-drop dose of croton oil was given four times daily, to move his bowels; but these not acting, we resorted to magnesia sulphate, one drachm in solution with two drops of dilute sulphuric acid and ginger. This proved more effective. Since then he has continued to improve. His bowels are in a much better condition, and during the last few days he has been placed upon the sulphate of strychnine, the one-fiftieth of a grain three times a day. His temperature has been slightly elevated, but not materially so. To-day he still presents evidences of lead cachexia in a marked manner, and there is still some wrist-drop. He is not able to move his extensors. There is also slight wasting of the muscles of the thumb, along with double wrist-drop of a moderate degree. There is a very marked blue line around the teeth of both the upper and lower jaws, but more so upon the lower. The tongue is now clean. There is still some sensitiveness of the abdomen, though to a less degree than on admission, and on examining his heart I note a systolic murmur, which I perceive towards the apex, and which is soft and short. He has no headache now, nor any attacks of giddiness, and his sleep is not disturbed. There is no anæsthesia nor any signs of altered æsthesia. His knee and elbow reflexes are gone.

This, gentlemen, is a very marked case of lead poisoning. The double wrist-drop, the anemia, the blue line upon the gums, the abdominal pain, tenderness, and the constipation, all make out the case, quite irrespective of the man's occupation. There are two or three points in the case which we will especially consider. In the first place, let me call your attention to the sensitiveness of the abdomen, which existed here, and yet exists to a diminished degree. This is one of the peculiar signs of lead poisoning. It is not connected with inflammation, and is most likly due to paralysis of the bowels with over-distension. It is rather relieved by deep pressure, as a rule, and is not associated with any rise of temperature; hence we cannot suppose it to be associated with peritonitis. It is a neurotic condition. There is nothing peculiar as regards the wrist-drop, except that it is double and not so marked as we might suppose from the gravity of the other symptoms. Thirdly, the absence of knee-jerk is common in these cases.

But, now, what is the meaning of this murmur which we detect in the heart? There are two suppositions which are tenable; and we must watch the case longer to see which is the more likely. It might be

an anemic murmur, or it may be the murmur of a latent mitral endocarditis—a very common result of lead poisoning. Indeed, I have been struck with the frequency with which valvular disease originates in an impregnation of the system with lead. Hence I am very suspicious in all cases of cardiac murmur associated with lead poisoning. The murmur here I think is organic.

I ground my belief that the murmur is not anemic on the fact that it is heard at the apex of the heart and is limited there. When a murmur is so limited, and does not extend to the base at all, I think we may generally correctly infer that it belongs to an organic disease of the heart, rather than to an anemic condition of the system.

Let us look at the prognosis and therapeutics of this case. The prognosis is favorable. The man will recover. What is his treatment to be? He had been placed on the iodide of potassium, which is the best eliminant of all metallic substances and especially of lead. But this had to be suspended because of the condition of the stomach. We then resorted to sulphuric acid and magnesia, the latter to keep the bowels open and the former to make an insoluble salt of lead. I would call your attention here to the value of giving small doses of sulphate of magnesia, with small doses of sulphuric acid. This is an excellent plan of treatment for obstinate constipation where there is paralysis of the bowels. Trousseau gave from ten to twenty grains of magnesia at short intervals. In this case we gave one drachm every hour until one ounce was taken, and to this treatment we added strychnine. Now, shall we continue this, or revert to the iodide of potassium? I admit, I should like to revert to the iodide. The tongue is cleaner and the stomach better, and I feel that with ten grains of potassium iodide three times a day, we can do more for the lead cachexia and more to relieve the latent heart trouble. We will, therefore, stop the sulphate of magnesia and morphia treatment, continuing the strychnine.

Delirium in Pneumonia.

I have next to show you a case in which the discussion will be rather a discussion of one of the chief symptoms than of anything else, as the case is obvious enough as regards its other features. This man is 35 years old, and was admitted on the fifth of November. He was delirious on admission and very little history could be obtained, except that he was a hard drinker. He had been in the hospital before for delirium tremens, and just before his admission this time he had been drinking very hard. About two weeks ago he was taken ill, and he was thought to have typhoid fever. Stimulants were withdrawn and he was put on milk. On admission his temperature was 102½°, his pulse 102, his respiration 36. There was marked trembling of the tongue, which was heavily coated. His hand was tremulous and his pulse full, bounding and not dicrotic. His abdomen was tympanitic. There were no rose-colored spots. He was put on liquid diet and one-half ounce of whiskey every fourth hour. During the night he had hallucinations and illusions, but rested fairly well. On the eighth, pneumonia of the left base became manifest, and in the axilla fine crackling râles were heard at the end of inspiration. His cough was spasmodic, the sputum being rusty and small in amount, and he expectorated over everything.

Now this man has been violently delirious, and is still so, though he has improved considerably during the last forty-eight hours. His pulse during the last few days has been about 100, and has lost the fulness which it had on admission. The temperature, which was at one time high, rising even to 104°, has declined remarkably, and now ranges between 99° and 100°, resembling a crisis. Occurring simultaneously with the decline there has been a marked change in the pulmonary symptoms. There is less dulness and the râles are larger, more bronchial and less vesicular, while respiration is less frequent. There is no heart murmur, and the first sound is of only moderate strength. This man has undoubtedly a pneumonia of the left lung, but at the same time he has had delirium tremens. Whether the one came first or the other, our history does not allow us to state. The pneumonia of intemperate people is peculiar. Delirium in itself rarely occurs in pneumonia except towards the end, and even then the mind is often clear when the other symptoms are unfavorable. Early delirium in a case of pneumonia, in nine cases out of ten, suggests intemperance. I think it is very likely that here the pneumonia was really the beginning of the acute disease, after which the delirium developed. The drop in temperature bespeaks convalescence; and in this respect the pneumonia is not different from other pneumonias.

Can we get along in these cases without stimulants? My opinion is that, if we want to save the patient, we must give a certain amount of stimulus. We endeavored to do without it here for several days, but had to put the man back on it, one-half ounce every four hours; and he is improving since. By using certain remedies we may get on with less stimulants, and in my experience the best among these is cocaine, one-sixth of a grain every four hours, which gives good results. We shall continue the stimulus and cocaine in this case for a day or two, and then gradually diminish the dose. Then we shall put him on twelve grains of quinine in the day. His food is concentrated broths; and this shall also be continued.

INJURY OF THE ORBIT AND ANTRUM.—FRACTURE OF THE OUTER TABLE OF THE SKULL, WITH PENETRATION OF THE FRONTAL SINUS.—STAB OF THE CHEST.—INGROWING TOE-NAIL.[1]

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Injury of the Orbit and Antrum.

Gentlemen: The first case I shall bring before you this morning, is one of injury of the head. The patient, a man sixty years old, was thrown out of a wagon a day or two ago, falling upon his head and face. You will see at once that his right eye is more prominent than his left; and you will note a peculiar thick, gummy, yellow discharge from the right nostril. The man's consciousness since his admission has been complete; although he is said to have been stunned by his fall, and he has lain perfectly quiet in bed except when spoken to. But he is able to answer questions intelligently; and it is obvious that there is no serious damage to the brain. His temperature has not risen above 100°. His right eyeball moves under his control, but not so freely or so easily as the left does. Vision in the right eye is good, but not as perfect as in the left. The conjunctiva is puffy from effusion of blood into the areolar tissue beneath it. There is much bruising of the skin around the orbit, and it is clear that, as he struck the ground, there was a projection forward of the eyeball and rupture of a vein behind it, within the orbit; hemorrhage of course ensued, and the mass of blood poured out occupies the space behind the eyeball, pressing it forward, stretching the optic nerve and hampering the action of the muscles. This clot will be gradually absorbed and the eye will return to its place.

Now, as to the discharge from the nostril. You will note that the swelling of the cheek is marked, and there is much tenderness on pressure, which also increases the flow. This liquid is merely the normal secretion of the antrum, increased by injury of the bony wall. Patients with coryza often suffer from a sense of great tension across the upper jaw, which is relieved upon the flow of just such a yellow liquid. Sometimes the discharge becomes purulent. It is not so now in this case; but possibly it will be so later. A number of cases have been reported, in which a free flow of thin, clear yellow secretion from the nostril, without apparent cause, has been found to be the initial symptom of malignant disease within the cavity of the antrum.

In this case we shall simply keep the man at rest in bed, with cold antiseptic lotions to the injured parts.

Fracture of the Skull.

The next case is also one of injury to the head. This man was admitted yesterday, having been struck in the left temple, just back of the orbit, with a piece of wood thrown off by a circular saw at which he was working. He was able to walk, with some assistance, to the hospital. On his arrival, the wound, which was bleeding freely, was examined, and found to be about one inch in length. Within it was a bit of wood not much larger than a marrow-fat pea; and it seems almost impossible that this could have been the only piece which flew off from the saw and inflicted so much injury. For, on further investigation, the bone was found to be shattered, and, after enlarging the wound in the skin, I removed a number of loose splinters, involving part of the roof of the orbit. Yet the brain case itself was not damaged, the fracture being far forward, in the portion where the orbital and cranial layers are separated by wide-meshed cancellous tissue: the outer extremity of the frontal sinus. Making this wound thoroughly

[1] Delivered at the Pennsylvania Hospital.

aseptic, we were able to predict its speedy closure without serious trouble arising. A few years ago the established rule was not to explore wounds of the head, but to wait until symptoms of grave mischief ensued. Often and often, upon the appearance of such symptoms, operative interference was resorted to, but in vain; because it was too late. Now we pursue a more truly expectant plan; we forestall the danger before it actually appears. We cannot always do this. A boy was brought into my ward two years ago, who, while operating a nail-making machine, was struck in the head with a small piece of steel. The skull was punctured at the upper and anterior part of the left side; a probe, passed through the opening, met with no resistance, and seemed to traverse the brain almost entirely across. Yet the boy had no symptoms whatever. No operation seemed to be indicated on either side of the head. He was kept in the house for ten days and was then discharged, apparently well; but in a few weeks he was readmitted with a cerebral abscess, for which trephining was performed, but without saving his life. At the autopsy a foreign body was carefully searched for, but none was found.

Stab-wound of the Chest.

The next case is that of a young colored man who was brought in last night with a stab in the side of the chest. I have just now seen him for the first time. The knife had evidently penetrated the pleura; but it was not certain whether the lung was wounded or not. Dr. Gummey very properly introduced a rubber drainage-tube; but it does not seem to be doing any good. Under antiseptic precautions, and with sterilized hands, I remove it, and you see that it was blocked up by this clot of blood, partly within it and partly around it. There is no evidence of any damage to the lung. The tube is now cleansed and re-inserted, and a fresh antiseptic dressing is applied. Whatever secretions may form in the wounded pleura will escape through the tube; and should there be occasion, the cavity may be washed out with carbolized water, with dilute peroxide of hydrogen, or with plain boiled water, as circumstances may require. If there is no effusion within the pleura, the tube will be withdrawn in a day or two and the wound will heal.

You will remember my showing you a week ago a boy about ten years old, who had been stabbed in the back, and in whom the lung was wounded. Dr. Penrose saw him in my absence, and introduced two small rubber tubes, one into the lung-wound, the other into the pleural cavity. Antiseptic dressings were used, and no suppuration ensued. On the seventh day the tubes were removed, and the wounds healed kindly.

Some of you may have heard that during the late war it was suggested by Dr. Howard, a man of some prominence as an army surgeon, that gun-shot wounds of the chest should be treated by hermetically sealing them with collodion or other materials. Cases so dealt with did occasionally turn out well; but there was no certainty about it, and the method failed to find any general favor. Had the wounds been first rendered aseptic, it may be that the verdict would have been different.

Ingrowing Nail.

The next patient, a boy fifteen years old, has an ingrowing toe-nail—a small affair, but a very painful one. Cases of this kind will not infrequently present themselves to you, but rarely in so young a person. I cannot now dwell upon the causes of this affection; but will only say that, while sometimes due to the wearing of narrow-toed shoes, it is met with also where such a condition has not existed. I believe, however, that it never has been seen in persons who habitually go barefooted. There are two elements in this disorder, or rather two lesions: a swollen and inflamed, usually ulcerated, state of the fold of skin at the edge of the nail, and a ragged and hardened margin to the nail itself. Sometimes the former exists alone, at an early stage of the trouble; but later this portion of the bed of the nail becomes inflamed, and the nail itself grows unhealthily. I always look for, and almost always find, at the deepest part of the nail-bed, back under the skin, an abscess-cavity containing a piece of dead nail-substance. Sometimes it is necessary to etherize the patient and to cut away the affected nail in its whole length and about one-third of its width, along with the underlying nail-bed. But I prefer, when it can be done, as in this case, to take a small pair of scissors, with one blunt or rounded end, and to pass this under the ragged free edge of the nail, carefully paring it away. You see I do this without causing the boy much pain. I go away back under the skin. I have now opened the cavity of which I

spoke, and here is the bit of necrosed nail-substance which was lying in it.

There is now only a smooth edge of nail. I apply a solid stick of nitrate of silver to the swollen and irritated skin, not as an alterative, but as an astringent. Now the unhealthy surface is made aseptic with sublimate solution, and dusted with iodoform, and a gauze dressing is applied.

It is not always possible—indeed it seldom is—to carry out this procedure at one sitting. Usually the patient complains of pain when the point of the scissors has been carried back some little distance; and sometimes the parts become obscured by a free flow of blood. But, by carefully renewing the attempt at intervals of two or three days, I have been able in some unpromising cases to effect my purpose, and eventually to give complete relief. Sometimes, in the class of patients met with in hospital practice, it is better to resort at once to the more heroic plan, in order to enable them to return sooner to their daily work.

COMMUNICATIONS.

MYALGIA.[1]

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Practitioners frequently use the term "Myalgia" as synonymous with "Muscular Rheumatism," and in many of the text-books the two words are used interchangeably, while in a few works myalgia is classed with the neuralgias. Pepper says that these affections: rheumatism, myalgia, and neuralgia, have very little in common; pain on motion being the only symptom present in them all. It is true that tenderness upon pressure exists in all; but in neuralgia it is localized over a nerve trunk or branch, while in myalgia it is generalized, extending over the whole muscle or group of muscles affected. In true rheumatism the tenderness is around the joint, and there is always pyrexia, acid sweat, highly acid urine and a decided tendency to heart complications; all of which are absent in myalgia. In the majority of instances myalgia is simply a cry for food from muscles poorly nourished and overworked. It is really not a disease, it seems to me, nor even a symptom of a disease—it is a very local affection, confining itself to a single muscle or at times to groups of them, the position and name being designated by the seat of the trouble. Thus cephalalgia or cepalodynia is a soreness of the scalp muscles, felt upon moving them, and aggravated by pressure. In not a few cases the pain is sharp when there is the slightest movement, and a dull heavy ache when at rest. Torticollis is myalgia affecting the neck muscles on the anterior and lateral aspect. This can be easily diagnosticated from the torticollis, or wry-neck, resulting from caries of the vertebræ, or due to a neuritis, as this latter is a disease of slow development, of marked chronic course, and has great tenderness over the spine. The term "cervicodynia" is sometimes applied to a myalgic affection of the posterior neck muscles. Pleurodynia, where the seat of pain is in the pectoral and intercostal muscles, may be mistaken for intercostal neuralgia upon superficial examination; but if no pain be elicited upon pressure on the three diagnostic points—at the sternum, over the spine just at the exit of the nerves, and midway between, we may be positive that there is no neuralgia present. Lumbago affecting the muscles of the back in the lumbar region, together with torticollis and pleurodynia, are the most common forms of myalgia, and in some cases are very obstinate and oft recurring. In such cases autopsies show negative muscle changes and no fixed lesion. Muscular degeneration has been found in a few instances.

From clinical observation it appears that those persons who have inherited a gouty diathesis are no more liable to suffer from myalgia than are those free from this taint. In some cases, it must be acknowledged, there exist an unknown idiosyncrasy which seems to render one individual more vulnerable to an attack than another; though the reason for this is unexplained. The most fruitful cause of myalgia is overwork: either violent exertion of muscles unused to it, or ordinary effort much prolonged. Exposure to cold, damp cold, when the person is overheated and fatigued, may precipitate an attack. Malnutrition, either of single muscles or of many, is always a forerunner of myalgia; hence persons leading sedentary lives often complain of it; loss of muscle tone being induced by lack of exercise. The "growing pains" found in rapidly-growing children are undoubtedly of a my-

[1] Read before the Montgomery County Medical Society.

algic nature. In all cases of myalgia there will be found to exist a demand for work which is not equaled by the food supply.

The onset of myalgia is generally sudden; the pain is sharp and cramp-like when the affected part is moved, comparative ease being obtained by keeping the muscles in a relaxed condition; though even then, in many patients, there may still be a feeling as if they had been pounded. The muscles are slightly full and very tender, showing some slight evidences of inflammation; but there is no fever, redness, heat or urinary changes, and the appetite remains unimpaired if the attack is of short duration.

The prognosis of myalgia is good, as far as recovery goes. The attack may last a few hours, days or weeks, and its aptitude for recurring is very marked, if the patient is subjected to the same conditions which brought on a first seizure. It has been found to take on a chronic form also.

In neurasthenic people, cod-liver oil seems to be somewhat of a prophylactic.

A brisk purge, followed by a dose of salts or citrate of magnesia is a good beginning treatment. The part should be kept at rest as much as possible and warm. In torticollis, the neck may be wrapped in hot flannel and bathed with some stimulating or anodyne liniment. The interrupted Faradic current often proves of great benefit. Massage, given by a skilled manipulator—not merely rubbing, but grasping the muscles separately and kneading them between the fingers is also useful. In omalgia, where the deltoid muscle is the seat of pain, massage seems to do but little good. The galvanic current, of a strength of from 150 to 300 milliampères, and stronger if your patient can bear it, is often of service. It should always be given in strength sufficient to cause the skin to redden, using small electrodes very well moistened, and applying them to the motor points of the muscle. One application, of fifteen or twenty minutes, following this by wrapping the shoulder in cotton, will in many cases effect a cure.

Phenacetine and salol, two and one-half grains each, in capsule, repeated every three hours, have given great satisfaction in cephalalgia. These drugs are both analgesic, and seem to answer admirably in such cases.

Pleurodynia is one of the obstinate forms of myalgia. It occurs more frequently upon the left side. Occasionally it is bilateral. The patient leans towards the affected side, and takes very shallow breaths, and holds herself—I say herself advisedly, as pleurodynia occurs much more frequently in females than in males—as every movement, cough or sneeze causes a lancinating pain, forcing cries from the sufferer. One must, of course, differentiate between pleurodynia and pleuritis or intercostal neuralgia; and it is not a difficult task in the generality of cases, to make a clear and positive diagnosis. In persons of a very nervous temperament the temperature will sometimes rise in pleurodynia, but it will quickly subside if the chest be strapped with overlapping bands of adhesive plaster, running obliquely forwards and downwards from the spinal column to the sternum. In mild cases friction with the hand moistened with a lotion consisting of one part each of laudanum and chloroform and two parts of alcohol, will answer without the adhesive strips.

When the pain of myalgia is in the limbs or gluteal muscles, a steam bath, with a good sweat induced by a Dover's powder and a hot drink, will prove beneficial. In every case a purgative, as has been stated, will be a good starting point for treatment.

Lumbago is exasperating to the patient, and in not a few cases is quite as trying to the medical attendant. The seizure is sudden. A person stooping to pick up something finds himself unable to straighten up, and when obliged to move, walks with his body bent at the hips. This is the most severe form that myalgia takes; and the patient must be kept quiet in the position which affords the most relief. Hot applications, dry or wet, are very grateful and soothing in these cases; but narcotics will often have to be resorted to. Sometimes inserting the hypodermic needle will afford a cure; and at times acupuncture acts like magic. In very stubborn cases the actual cautery may be used. Objection will doubtless be made to this by the patient, and it would be wise to broach the subject gently. Ice and salt should be applied before using the cautery, and the pain will be materially lessened. The eschar should be dressed with carbolized oil, which is both antiseptic and pain-relieving. The use of morphia is absolutely necessary at times, as the patient will weaken from loss of appetite and sleep in prolonged cases, if pain is not quieted. The ordinary hypnotics, such as sulfonal, etc., will not answer in myalgia, as a rule, though they may be tried.

Flannel should always be worn from neck

to ankles by persons subject to such attacks. It not only prevents chilling by absorbing the perspiration, but serves to keep the body at an equable temperature, thus lessening the liability of muscles that are tired or strained to become affected by cold. Iron, arsenic and strychnia are valuable tonics for cases of myalgia. Iodide of potash and syrup of hydroodic acid are also useful, from their alterative properties.

But in every case of myalgia, rest—absolute rest—is a positive necessity, in order that the muscles be allowed to regain their normal tone.

HYPERTROPHY OF THE TONSILS.[1]

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Of all the diseases of the upper air passages, I know of no one more conducive to the production of serious after-effects than hypertrophy of the tonsils. As to the etiology of this hypertrophy, very little is found in current literature. The exanthemata, diphtheria, and frequent attacks of pharyngitis, seem to be etiological factors. The strumous diathesis appears to be a factor in their formation, while on the other hand we find these hypertrophies in apparently healthy children. Mackenzie states that the disease not infrequently becomes developed about the age of puberty, owing, as some suppose, to a sympathetic connection between the sexual organs and the tonsils. Sex is not without some influence in producing the affection; for out of one thousand cases recorded in Mackenzie's tables, six hundred and seventy were in males, and three hundred and twenty-seven in females. Some cases follow acute attacks of quinsy, hereditary or acquired syphilis, granular pharynx, etc.

As a rule after the age of thirty years spontaneous cure takes place, it being the natural course of the tonsil glands to atrophy after this age.

One or both tonsils may be involved, usually both. In my judgment, no improvement has been made upon the pathology, as stated in the work of Dr. Sajous (*Diseases of the Nose and Throat*, 1888, p. 286) which is as follows: "As in hypetrophy of the glandular tissues of the naso-pharynx, the lymphatic element which forms an important part in the anatomy of the tonsils is probably causative in the maintenance of the early inflammatory process which forms the primary steps to the hypertrophic changes. When this has progressed for some time, the epithelial layer is greatly thickened, and the mucosa under it is permeated with lymphatic cells and new tissue elements. The size of the tonsils is principally increased by the proliferation of new connective tissue interspersed with bundles of fibrous tissues, while their density depends upon the degree of organization which these tissues have reached."

In many cases the presence of enlarged tonsils has been unknown, until they offered a mechanical impediment to the performance of the physiological functions of the pharynx. In the young or in children, their presence often causes a diseased condition of the contiguous parts, without in themselves presenting marked symptoms. The lumen of the pharynx is diminished by their size, and thus the passage of the respired air is restricted in proportion to the extent of the hypertrophy; hence the patient keeps his mouth open and breathes through it, to compensate for the lack of current inhaled through the nose. A catarrhal condition of the nose is excited by the accumulation of secretions, due to the limited air force to dislodge and expel them. The mouth and throat are kept dry and exposed to the action of what foreign bodies may be present in the atmosphere. The voice loses its resonance; snoring and disturbed breathing, sleep and dysphagia, are complained of, while all the objective and subjective symptoms of a catarrhal inflammation of the nasal passages and throat may be present, complicated in some cases with impaired healing, through involvement of the Eustachian tubes as a result of frequent attacks of acute tonsillitis. In some cases, the lacunæ or crypts are filled with a cheesy accumulation, which evolves a very fetid odor, contaminating the breath, and the inspired air.

The interference with sense of hearing, in some cases amounting to almost complete deafness, is a frequent concomitant of hypertrophy of the tonsils. It was at one time supposed that compression of the orifices of

[1] Read before the American Rhinological Association, October, 1890.

the Eustachian tubes played the principal part in the production of throat deafness; but the observations of the late Mr. Harvey tend to prove that the increase in the size of the tonsils proceeds in the direction of the mouth, and that as the tonsils enlarge, the Eustachian aperture becomes more patent than in the normal state. He therefore attributes this form of cophosis to chronic swelling and congestion of the mucous membrane of the Eustachian tube; and recent researches have shown one of its chief causes to be pressure of Luschka's tonsil on the posterior lip of the Eustachian orifice. The effects of continued mouth breathing, which are so manifest to all the Fellows of this association, may be appropriately reiterated: "The silly expression of the face, the dilated nostrils, the nervous manner, poor articulation, frontal headache, in many cases impaired hearing, may be due to hypertrophied tonsils. By the presence of these foreign bodies, for such they are, a constant mechanical irritation is kept up."

It is immaterial whether the hypertrophy be due to the engorgement of the crypts or lacunæ due to either an active or passive congestion, or to a true inflammatory hyperplasia, the indications for treatment are cogent. The treatments of these conditions are many and varied. Where there is a simple hypertrophy, due to an acute catarrhal inflammation, the topical applications of the mild astringents have proven to me to be of little benefit. At times a patient will present himself, complaining of pain upon swallowing. An examination will reveal enlarged tonsils with active inflammation in progress. A more careful examination shows a crypt aperture, further investigation showing it to be plugged with a cheesy substance, the removal of which affords relief without treatment.

The rheumatic character of acute tonsillitis, or hypertrophy is accepted by a large number of the profession. The salicylate of soda, at the commencement of an attack, in ten-grain doses to an adult, every hour or two until one drachm has been taken, will abort many attacks. On account of the decided nausea produced in many persons by this drug, of late I have used the effervescent salicylate of lithia with equally satisfactory results and no nausea. For the simple acute hypertrophy, the treatment is constitutional and locally astringent. If, after a few applications, the size of an enlarged tonsil is not diminished, puncturing, so as to produce free bleeding, has proved serviceable. If we resorted in many of these cases to local as well as constitutional depletion, we would have fewer true fibrous hypertrophies with which to deal, and would curtail very markedly the necessity for much subsequent treatment. Chromic acid (Merck) melted on a probe and carried into the crypt, is recommended and used quite extensively. Carbolic acid has its many advocates, as has monochloral acetic acid, trichloral acetic, glacial acetic, etc. When these acids are used, a film of cotton is wrapped about the end of a small probe and carried well into the crypts. The end sought is the production of a sufficiently active new inflammatory process to cause adhesion of the sides of the pocket—enough inflammation to destroy or produce absorption of what little thickening or excessive cell production which may have occurred. Nitrate-of-silver solution instead of causing a decrease in their size, seems to cause an increase, a fact theoretically explained by the stimulation induced by the agent, and its tendency to encourage formation of new elements, as stated by Sajous. When the tonsils are soft, the galvano-cautery is very effective, a few deep cauterizations being made twice a week. I have introduced the galvanic needle its full length into the tonsils at several different points about one-eighth of an inch distant one from the other. This has proved as efficient as the method just mentioned, if not more so, causing less pain at the time of the operation, and not so much uneasiness afterwards, in deglutition.

There is one precaution which should be remembered when using local applications of acids to hypertrophied tonsils, and especially when operating with the galvano-cautery, viz.: the possibility of having an active, extensive inflammation to follow, producing middle-ear suppuration. I recall three cases which occurred in this city. One following the use of carbolic acid, the second chromic acid, and the third the galvano-cautery. The last occurred in my practice, and I now believe it was due to faulty use of the same.

The galvano-cautery snare, where we have the history of hemorrhagic diathesis, is a great and valuable addition to our armamentarium. Dr. Morell Mackenzie recommends the use of London paste, applied once or twice a week, according to circumstances, over various parts of the organ. This method is slow and painful. Where the organ is fibrous, dense and hard, tonsil-

lectomy should be resorted to. While the danger from hemorrhage is reduced to a minimum, the time, suffering and inconveniences which are overcome by ablation render it, in my judgment, the operation for speedy relief, and it should always be performed where the hypertrophy is dense in character. Where we have the opposite state of affairs, that is, softness and bogginess, the methods previously mentioned are to be preferred. By the injection of a ten per cent. solution of muriate of cocaine into the parenchyma of the tonsils, the operation by constriction of the blood-vessels is rendered almost bloodless.

The tanno-gallic gargle of Mackenzie is an excellent after-treatment for the bleeding. Hot water is also very serviceable and less disagreeable. The tonsillotome as modified by Tiemann, where a section may be made at any angle is preferred. The bistoury with forceps is recommended. This method requires an assistant and the inability to be exact in the amount removed is a serious objection. The cold wire snare is painful, slow, and will eventually be superseded by the galvano-cautery. The treatment after removal, by whatever method employed, should be constitutional and local. Most all patients suffering from tonsillar hypertrophy are anemic. With children the constructives and hematinics are indicated, the syrup ferri iodidi, syrup ferri albuminatis, and elixir of the three chlorides (iron, arsenic and mercury) being very serviceable, the latter especially during the "chlorotic" age of girls. The simpler the after-local treatment is, the better and more speedy the results.

The cause being removed, the use of a cleansing spray of melted vaseline with an astringent, stimulant or sedative, as required, will rapidly relieve. If the uvula and soft palate remain relaxed, after tonsillectomy and the use of the astringents, amputate the uvula. The ear symptoms, if acute, generally subside rapidly. After removal, special attention is called to the condition of the nasal passages. Thorough cleanliness is to be secured by the removal of all secretions. If hypertrophies of a chronic character exist over any of the turbinated processes, they should be removed by means of the cautery or in some other way. Simple distention of the Eustachian tube, by the method of Politzer or Valsalva, will oftentimes relieve the patient by a few treatments. These methods should never be used unless the nasal passages, as well as the vault of the pharynx, has been thoroughly cleansed. If there is no marked change in the tympanum, massage has proved of service. Of all the methods named, in my judgment, tonsillectomy, or ablation and the galvano-cautery are the best.

FOREIGN CORRESPONDENCE.

BERLIN LETTER.

Opening of the Berlin University.—Glimpses of the Medical Student's Life.—Legal Protection of German Practitioners.—Suppression of Patent Medicines.

BERLIN, October 13, 1890.

The Royal University inaugurated yesterday the beginning of the new academical year by a solemn commencement held in the magnificently renovated aula. Odd procedings, as introduced hundreds of years ago, are still in vogue during that celebration. The retiring and the newly installed Rectors of the University appear attired in most gorgeous costumes, invested with the insignia of their exalted office, and are led to their seats by the janitors of the institution, who in their scarlet robes look like veritable hangmen.

The new Rector, Professor Tobler, delivered a lecture on the study of the Roman languages and announced the opening of the academical year. The strangest thing, however, connected with the affair was that not a single student was present and the uselessness of the announcement will be conceived from the fact that at present there are no students at all in Berlin. Before the 3d of December no "Musensohn" condescends to visit a lecture room, and consequently no professor is able to begin with the course.

It will interest the readers of the REPORTER, perhaps, to follow up the course pursued by the young medical student on his entrance in the University. The Rector compels him to swear to obey the laws of the University and hands him his card of matriculation. This card confers exceptional and almost undue powers upon the young man. No policeman, for instance, is entitled to arrest or touch the proprietor of the card, nor do the common courts have any jurisdiction over him. A policeman dares only demand the delivery of the card, whereupon arrest and judgment may follow, but only by

the academical authorities. Quite handy, too, is the card, for if the student desires to visit theatres, concerts, or similar places of amusement, on presenting it he either enters free or pays about one-fourth of the usual admission. If at times he should be hard up, his card proves again his best friend; for he can easily obtain money, clothes, provisions, books and almost anything at all on the strength of it. As explanation of this I will say that a student is here regarded *a priori*, as a man of honor who if unable to pay to-day, will surely do so some other time. Hundreds of legacies, in addition, administered by the University, afford poor and diligent students financial aid, and every professor is willing to wait for his fees even five years or longer. There is little or no work done during the first academical year; clubs and saloons absorbing the student's whole time. The American student does more work in three years than the German does in four. The latter may be seen parading *Unter den Linden* from 11 A. M. to 2 P. M. At two they take their lunch in the Academische Bierhalle, at a cost of twelve cents, including a glass of beer; from 3 to 5 P. M. they take their nap. At six there is a rendezvous *Unter den Linden* with members of the Club, and from 8 to 2 A. M. they are hard at work in their Stammkneipe, that is, the saloon of their Club. This is no fanciful representation, but a true description of the way in which the young German med. spends his first academical year. The second year is largely devoted to fighting, fencing and duelling; for a student does not pass for much unless his face is graced with two or more disfiguring cicatrices. In the third year he visits lectures and hospitals, and in the fourth he is spurting to make up for his prior waste of time. Examination time draws near and the necessary cramming under the "*Repetitor*" having been completed, he presents himself for examination at the first "station," which in Berlin is presided over by Jupiter Tonans, *i. e.*, Prof. Virchow. The fate awaiting him there, he knows beforehand; Virchow knows no mercy, and of one hundred candidates five only succeed at the first trial. As a rule the thunderer throws all candidates at first. Then they come up again before him in six weeks. Liebreich too is a great stumbling-block for the poor candidate. He gives you a liver and desires to know how much arsenic there is in the organ, and is a strict examiner on chemical formulas, although they do not come strictly within his province. Candidates are compelled to appear for examinations in full-dress suit, white kid gloves, and white tie. The passing of this so-called "Staatsexamen" (State examination) confers upon the successful candidate the title of "Arzt" or physician, and the right to practice, while the title of Doctor must be especially acquired. No foreign diplomas, save those of Australian Universities, are recognized in Germany.

While in this respect the German physicians enjoy great protection, legislation has on the other hand done the profession an incredible wrong. In Germany everybody has the right to practice medicine, no matter whether he knows little or nothing of the healing art. To be sure no illegal assumption of the titles "physician" and "doctor" is permitted. Hence it is not surprising to find quackery in a high state of development in Germany. Fortunately police vigilance is so strict, and punishment for malpractice is so severe, that quacks usually confine themselves to hydropathic and similar non-remedial measures. Electric and magnetic quack doctors singularly do not flourish much in Germany. Homœopathy too is very little known here. I have never yet noted the sign of an homœopathist, and they are classed without ceremony with the quacks. It is strange, however, to find that every apothecary has the sign "*allopathische und homœopathische Apotheke.*" The sale of patent medicines is strictly forbidden, and every newspaper advertising them is severely fined. The Superintendent of Police of Berlin publishes monthly in all papers an analysis of newly appearing patent medicines, states their actual cost, emphasizes their uselessness or possible injurious character, and warns against their purchase. Only recently H. H. Warner's Safe Kidney Cure was thus proscribed by the authorities. It is clear that under these circumstances venders of patent medicines cannot become millionaires as in America.

—In a late number of *La Lyon Médicale*, attention is drawn to an article by Dr. Filatoff, of Moscow, showing that heliotrope can be substituted with advantage for quinine. The plant, it is stated, has for some time been in use as a popular remedy against fevers in Russia, in Turkey, and in Persia. In each of these countries a tincture is prepared by macerating in alcohol the leaves and stalks of the plant.

PERISCOPE.

Curability of Acute Phthisis.

Dr. McCall Anderson, Professor of Clinical Medicine in the University of Glasgow, says in the *British Medical Journal*, November 8, 1890:

The term acute phthisis is frequently used in a very vague manner, and is applied to cases which have no title whatever to the appellation, as any one can readily satisfy himself by a perusal of the medical journals. It is, therefore, important at the outset that I should specify the limited class of cases to which I am about to refer. By acute phthisis, then, I do not mean cases merely of short duration, nor chronic phthisis associated with more or less fever, nor those which, while running their course, suddenly develop acute symptoms. But I allude to cases of phthisis setting in suddenly, with high and continuous fever, great prostration and profound involvement of the system, reminding one rather of typhus or a severe attack of typhoid fever than of a pulmonary affection. Indeed, in some instances it may be necessary to watch the course of the disease for some days before an absolute diagnosis can be made, so that the term "galloping consumption," used by many of our leading authorities, although not a scientific one, conveys to the mind a most accurate impression of the kind of disease with which we are dealing.

Such cases are comparatively rare, and are only exceptionally met with in hospital practice; not only on this account, but because the patients are supposed to be too ill to be removed, or, if removed, they are fully as likely to find their way into a fever as into a general hospital.

There are two forms of acute phthisis: (*a*) acute tuberculosis, and (*b*) acute pneumonic phthisis. In acute tuberculosis tubercles are more or less copiously disseminated throughout the lungs, and often also in other organs. But the symptoms of acute phthisis do not appear unless or until these foreign bodies produce congestion or inflammation of the pulmonary tissues, and, if the patient lives long enough, breaking down of the lung tissue may occur here and there, with the development of small excavations. That the infiltration of the lung with tubercles does not necessarily lead to acute phthisis is proved by the occasional discovery, *post mortem*, of obsolete tubercles scattered through the lungs in the case of those who never experienced pulmonary symptoms during life.

In acute pneumonic phthisis the disease exhibits almost from the first a more or less extensive consolidation, most frequently of the upper lobes, which often spreads to other parts, and, instead of resolving in a week, like a croupous pneumonia, leads to rapid and widespread destruction of lung tissue, which soon terminates the life of the patient.

A perusal of the literature of the subject leads to the conviction that authorities are very hopeless with regard to the prospects of sufferers from this disease, and, while I have read numerous records of fatal cases, I have never met with a carefully recorded case fulfilling the definition of acute phthisis, as I understand it, in which a complete restoration to health occurred. There are many, however, who hold that acute tuberculosis is the more certainly fatal of the two, while I am rather inclined to the opinion that acute pneumonic phthisis is probably the more dangerous, as it leads to such rapid and widespread destruction of the pulmonary tissue. Including the case which follows, I have put on record seven instances of acute phthisis, all of them treated in a similar manner; and it is a remarkable fact that of the seven, five recovered. Of the two fatal cases, one was beyond the reach of recovery when he came under observation, his lungs being extensively disorganized, while in the other instance the fatal issue was due to the complication of perforation of the lung. There is an interest, however, in connection with the fatal cases in reference to diagnosis, for in both the *post-mortem* examinations showed their tubercular nature. The cases to which I have just alluded—of which four were published in the *Lancet*, March 24 and March 31, 1877, and the fifth and sixth in the *British Medical Journal*, February 19, 1881, the seventh being described later on—tend to show that if acute phthisis is grappled with early and energetically, and *with an expectation of success*, the prognosis is far from gloomy, and the more I see of the disease the more hopeful do I become.

Let me give you a brief outline of the kind of treatment upon which, in my opinion, reliance may be placed, but it must be understood that no two cases can be treated exactly in the same way; each patient and his surroundings must be specially studied before deciding upon our line of action. The principal indications are—1, to keep up

the strength; 2, to keep down the fever; and 3, to treat any special symptom or complication which may arise.

Two thoroughly trained and reliable nurses are indispensable, one for day and the other for night duty; for without admirable nursing no hope of improvement can be entertained; and the hygienic and other surroundings of the patient should be satisfactory, so that we need not be surprised that, when the disease occurs in the homes of the working classes, it is almost necessarily fatal, and that hospital patients have the best chance of recovery. The patient must be fed constantly on fluid food (soup being avoided if diarrhœa is present) both day and night, and stimulants (from f℥ii to f℥x) are required early in the attack, but should be given in small quantities, frequently repeated and along with the food. In fact, the dietetic treatment should correspond with that of a case of fever presenting symptoms of a similar degree of severity. At bedtime a subcutaneous injection of sulphate of atropine (gr. $\frac{1}{100}$ to gr. $\frac{1}{60}$) is given. This checks perspiration when present, acts as a sedative to the system, indirectly helps to reduce fever and diminishes the secretion from the lungs.

Remedies are given with the view of lowering the temperature. This is a point of the utmost consequence, because the majority of the patients die consumed by the fever. Some benefit is derived by allowing the sufferer to suck ice freely, by giving the food and drinks iced, by sponging the body with iced vinegar and water, or even by using iced enemata.

But our main reliance is upon one or more of the following methods:

1. Niemeyer's antipyretic pill or powder every four hours, containing gr. 1 quinine, gr. ½ to gr. 1 digitalis, and gr. ¼ to gr. ½ opium. The proportion of opium may even have to be increased beyond this if there is much diarrhœa. The effect of the digitalis must be carefully watched, and it must be omitted for a time if the pulse becomes preternaturally slow and irregular and the secretion of urine very scanty.

2. The administration daily—particularly shortly before the temperature tends to be highest—of from 10 to 30 grains of quinine, given, as suggested by Liebermeister, either in a single dose or, at all events, within an hour.

3. The application of iced cloths to the abdomen for half an hour every two hours so long as the temperature exceeds 100°. The application of iced cloths is made in this way:

The night-dress is pulled well up over the chest so as to avoid any possibility of its being wet, and, for a similar reason, a folded blanket is placed across the bed under the patient's body. The usual bed-clothes are arranged so that they reach up to the lower part of the chest only, which latter is covered by a separate blanket in order to prevent unnecessary exposure while the cloths are being changed. Two pieces of flannel are employed, each being sufficiently large when folded into four layers to cover the whole of the front and sides of the abdomen. One of these, wrung out of iced water and covered with a piece of dry flannel to protect the bed-clothes, is applied, while the other is lying in a tub of iced water at the side of the bed. The pieces of flannel are changed every minute, or so often that they still feel cold when they are removed. The changing of the flannel, particularly when two persons are in attendance, one to remove the bed-clothes and the flannel, the other to apply the piece which is freshly iced, can be accomplished in a few seconds.

I mention these apparently trivial details because I often see the process carried out in such a way as to be worse than useless, and because I have frequently been interrogated on the subject. But I think it right to add that I do not wish to lay too much stress upon the value of iced cloths by themselves, but to attribute the success of the treatment to the combination of measures employed. Of course the same precautions must be taken in using iced cloths as in the employment of the cold bath, and they must be removed at once if the temperature falls to near the normal, and if there is any tendency to coldness and collapse.

Such is a general outline of the line of treatment from which such excellent results have been obtained, and the more experience I have of it, the more confidence do I place in it; but, of course, in this, as in all disease, we must avoid routine, and must study each case by itself, as no two cases can be treated exactly alike.

New Antiseptic Dressing.

Dr. Francis T. Heuston, in a paper read in the Section of Surgery at the annual meeting of the British Medical Society,

Birmingham, July, 1890, said that some months ago Dr. Tichborne, whose work in the chemical world is so well known, suggested certain drugs which he considered would probably meet his requirements. After due consideration Dr. Heuston experimented with those which he thought would be most effectual, chiefly napthalin and sulphite of zinc; the latter proved so successful in his hands that he brings the result before the profession in the hopes that it will be found of service. He claims for the dressings prepared with this salt that they are non-poisonous, non-irritative, and highly antiseptic, while their application is extremely simple.

In applying the dressing Dr. Heuston sometimes dips the piece of gauze placed in contact with the wound in a weak carbolic solution—this is not, however, essential—and then applies three or four layers of dry sulphite of zinc gauze, the whole being retained in its position by a simple gauze bandage. As will be seen, it is applied in the manner commonly employed in the use of alembroth gauze.

As far back as 1870 Dr. Tichborne introduced sulphite of zinc to the profession as an antiseptic. At that time this salt was not in commerce, and the few existing references which were to be found in such books as Gmelin's *Handbook* or Watt's *Dictionary of Chemistry*, were anything but correct. In the paper above referred to, its properties were described, as also a new process for its preparation, and its use as a general antiseptic suggested; but in 1870 antiseptic surgery, as now understood, did not exist, and it is now proposed to utilize this salt to prepare an antiseptic gauze having special properties. Dr. Heuston gives the result of a carefully conducted series of hospital experiments to which he has submitted it, and which seem to conclusively prove its great value as an adjunct in operative surgery. He says:

"In the original paper read before the British Pharmaceutical Conference, 1870, the chemistry of this salt and the process of making it were dwelt upon very fully; for the purposes of this paper it will, therefore, be only necessary to give concisely a few of the salient points which bear upon the inquiry.

"Sulphite of zinc is best prepared by mixing in solution six parts of zinc sulphate and five and a quarter parts of sodium sulphite. The new salt forms slowly, and falls as a white crystalline precipitate; it is very insoluble in water, but soluble in an excess of sulphurous acid.

"Sulphite of zinc exists in two conditions of hydration as a di or trihydrate according to the temperature at which it is dried, as we will assume that in making the gauze and similar fabrics the salt is always dried at 100° C., the composition of the sulphite present will be $ZnSO_3 2H_2O$. When dry, sulphite of zinc is a perfectly stable compound, and we have gauze six months old which possesses all its pristine antiseptic properties. We tinge the gauze with an organic dye, and this fact affords an easy method of determining if the gauze, however old it may be, possesses its antiseptic properties. If a little gauze is placed in water and acidulated with sulphuric acid, it at once bleaches from the free sulphurous acid, when wet or in solution it suffers a slow oxidation, and hence its antiseptic power. It is very insoluble in water, being only soluble in that menstruum to the extent of 0.16 per cent. (about ¾ grain to the ounce). When such a saturated solution was tested from day to day with a volumetric solution of iodine, its oxidation into sulphate was seen to be very gradual, but very regular.

"On the eighteenth day, the sulphurous acid was all converted into sulphuric acid. When sulphite of sodium is mixed with sulphate of zinc, the sulphite of zinc is very slowly formed, but is ultimately all deposited, owing to the insoluble nature of the new-formed salt. This phenomenon adapts it naturally and with ease to the permanent saturation of any fabric, as gauze or lint, and without the intervention of any adhesive material such as starch. We first boil the gauze in water to thoroughly wash and sterilize it; then upon this gauze is poured a boiling solution of zinc sulphate and sodium sulphite in equivalent proportions; when thoroughly mixed and saturated the whole is allowed to stand twelve hours. The zinc sulphite is deposited in and around the fibres of the fabric in microscopic crystals, but soft and even unctious to the feel. The deposition of the zinc sulphite is represented by the subjoined equation:—

$$Zn\ SO_4 + Na\ SO_3 = Zn\ SO_3 + Na\ SO_4.$$

"Now, it will be noticed that sodium sulphate is a resultant of the above decomposition; the greater part, however, remains in solution, and we pass the gauze twice under rollers submerged in water with the object

of removing all traces of this sodium sulphate which might remain. The gauze may be dyed, with the twofold object of watching the progress of the discharges, and with the purpose of branding it distinct from other surgical dressings."

In the discussion, Mr. Kendal Franks said he had found so much cutaneous irritation following the use of the mercuro-cyanide gauze that he was glad to put to the test of experience the gauze dressing described by Mr. Heuston. He had been very fairly satisfied with the alembroth gauze, though it also occasioned irritation of the skin. He has now used the sulphite of zinc gauze in many cases. In every case he has found the wound to run a perfectly aseptic course, and in no case has he seen the slightest irritation of the skin beneath the gauze. It would, he thought, prove a valuable addition to surgical dressings.

Sure Cure for Phthisis.

The Paris correspondent of the *Lancet*, Nov. 8, 1890, writes:

M. and Madame Foux are an old couple of about seventy years who have discovered an "infallible cure for phthisis." M. Foux exercises the calling of engraver, but, devoting his leisure hours to scientific research, he succeeded, aided by his spouse, in inventing a potion "*fondant, détensif*, and *cicarisant*," which plays havoc with the tubercle bacillus and immediately restores the patient to health, even in desperate cases. The couple enjoyed an immense reputation in the east end of Paris, and numbers of people came from all quarters to purchase a few drops of the precious elixir, which has quite forestalled the rather late-in-the-day remedy which Koch, of Berlin, is at so much pains to make public. M. Foux differs from this investigator, however, in that, in order to preserve in perpetuity the secret of his labor, he always administers it in person, or, failing this, he deputes the trusty partner of his joys and fame to act for him. When the patient has swallowed the draught Foux retires, carefully pocketing his fee, but he never leaves a drop of the remedy in the hands of the sick person. On a recent occasion he was summoned to the bedside of a poor fellow in the last stage of consumption; but, having other and more pressing professional engagements, he sent his wife with the draught. She administered it, but scarcely had she gone than the patient was seized with severe hemoptysis. Now with this untoward crisis the harmless decoction had in all probability nothing whatever to do; but such is the fickleness and ingratitude of human nature that the friends attributed the hemorrhage to the medicine. The nearest chemist was now summoned, who in turn called in a doctor. Having attended to the patient's immediate wants, they decided to summon the philanthropic lady to exhibit another potion, but set a trap to confiscate it before she could do so. For this purpose the chemist concealed himself in the room, and appeared just as the draught was about to be swallowed by the patient. Having seized the phial, he commanded the old lady to accompany him to his shop. Once arrived there, he put the bottle down for a moment, at the same time threatening the quack's wife with the consequences of poisoning people. Seeing an opportunity, she snatched the phial and swallowed its contents, retorting on the baffled chemist that she was a strange poisoner, since she drank her own poisons. When brought before a police magistrate a few days later, the male quack declared with the most haughty dignity that nothing in the world would induce him to reveal his secret. The female prisoner gave an amusing account of the trap that had been laid for her, declaring that were it not for her presence of mind, not only would the secret have been discovered, but that the infamous chemist would not have scrupled to add some poison of his own to her drug. She naively declared, however, that she could give no better proof that the medicine was harmless than by swallowing it herself, and she caused considerable hilarity by calling the magistrate's attention to the fact that she was not yet dead. In the result they were fined $200.

Carbonic-acid Gas for Gonorrhœa.

Dr. Thomas C. Minor, of Cincinnati, in the *Cincinnati Lancet-Clinic*, November 22, 1890, proposes the treatment of gonorrhœa and gleet with carbonic-acid gas water, and seems satisfied with the results he has obtained in a few cases by this method. After describing his first case he says:

"During the summer of 1888 at least three other cases were treated in the same manner, with varying results as to the duration of treatment, and in all these cases the

marked effects of checking discharge and allaying urethral irritation were manifest. One of these cases recovered in five days, but in the other two cases the disease persisted for at least two weeks before it disappeared. In these cases, as in the first, the supra-pubic pain was intense. Further experimentation was discontinued until the winter of 1889, when two more cases were treated in a similar manner; also a case of gleet of eight months' standing. The former cases yielded to treatment, one in five days and the other in about two weeks. In the case of gleet almost three weeks' time was consumed before the patient was perfectly well. During the present year (1890) two cases of acute gonorrhœa were most satisfactorily treated, one yielding in six days and the other in two weeks.

"The supra-pubic pain following the injections has been noticeable in all of these cases, and is the only objection offered to the application of the treatment; in fact, in several cases, when attempts were made to apply the remedy a second time, the patients objected so strenuously that the treatment was not pursued further.

"The advantages of this plan of treatment may be briefly enumerated:

"1. Its ready adaptability. A patient, after having the method used once or twice, can apply the treatment himself.

"2. The speedy diminution in the amount and character of the discharge. The amount of discharge is usually lessened at least one-half by the second day of treatment; it loses its purulent character, becoming thin and watery.

"3. The advantage of an entirely local treatment, without change of diet. No nauseous drugs like copaiba and sandal wood are given to upset the stomach, and in two instances where the patients took a few glasses of beer daily no change was made in food or drink, although those patients who did not take stimulants yielded most rapidly to treatment.

"Care should be taken when the supra-pubic pain comes on to immediately relieve the tension in the urethra and allow the seltzer or vichy to flow from the urinary passage. In cases where not very intense pain results the gas may be allowed to have full play on the mucous membrane for four or even five minutes.

"Several medical friends in this city are now experimenting with this, so far as the writer is aware, new plan of treatment, with varying results. Dr. W., who will probably report some cases before one of the societies, at my suggestion used the carbonic-gas water, warmed, for vaginal irrigation in several cases of leucorrhœa with surprisingly good results; also in a case of cystitis, where the results were more than usually beneficial.

"As the treatment is so simple, it merits a trial at the hands of careful practitioners. The apparatus is not complicated, being only a charged syphon with a rubber tube armed at the urethral end with either a champagne tap or a female catheter; thus any one can easily make the therapeutic application. It has seemed to the writer that in cases of stricture a catheter could be connected with the gas-containing tube and the pressure of the gaseous water from the syphon be made to distend the urethra directly in front of the instrument, thus avoiding unnecessary laceration and hemorrhages.

"In making these irrigations it is well to remember that the patient should void his urine before the injection is used."

Induction of Premature Labor.

At the Tenth International Congress, the Gynecological Section discussed the indications and methods for the induction of premature labor. The correspondent of the *Medical Press*, October 8, 1890, writes that the discussion was introduced by Dr. Calderini, of Parma, who commenced with the statement that in the interest of the child premature labor should not be induced when the pelvis was ricketty, and the conjugate below 7½ ctm. (2 15-16 in.). With proper antiseptic precautions, on the other hand, when the pelvis was contracted, non-ricketty, when the conjugate was 8½ ctm. (3 1-16) or even less, premature labor could be induced with advantage. The mortality of children born after prematurely induced labor might be diminished. The best method of inducing it was by warm douching through a Fergusson's speculum, and the introduction of a solid bougie up to the fundus uteri. In certain diseases it was advantageous to puncture the membranes simultaneously. Dr. Calderini brought forward a table showing the comparative maternal mortality with the different methods of procedure, viz.: an ascending mortality from turning, induction of premature labor, symphysiotomy, forceps, perforation, Porro's operation and Saenger's Cæsarean section. The child mortality on the other hand ascended from

Saenger, to Porro, symphysiotomy, forceps, artificial induction of labor and turning. In pelves of over 7.5 ctm. induction of artificial labor was to be preferred, and at the end of term combined version. In the interests of the child the preference might be given to Cæsarean section, but the maternal mortality from the operation was still too high to permit of its displacing induction of premature labor, turning and forceps.

Prof. Dohrn, of Königsberg, was of opinion that induction of premature labor was the most appropriate method of delivery when the pelvic narrowing was moderate—conjugate 7 to 8 ctm. He could give recent statistics of 271 cases in proof of this; 271 inductions of premature labor gave 163 living children, or 66.1 per cent., whilst 171 full-time labors of the same women gave 50 living children, or only 29.3 per cent. As regarded the mothers the results were: 318 inductions of premature labor, 16 deaths, equal to 5 per cent. Cæsarean section could not yet take the place of induction of premature labor. Diameters of 7 to 8 ctm. were the lowest limit of artificial induction. The most careful antisepsis was necessary. He warned his hearers against operative delivery of the induction of premature labor.

Prof. Leopold, of Dresden, had induced premature labor in 75 cases with one death, but his maternal mortality after Cæsarean section was 9 per cent. He said the indication for artificial premature labor began where that for Cæsarean section ceased, it could only come into consideration in pelvis of 7 ctm. (2¾ in.) and over. The mortality of children was great from the difficulty of correctly estimating the period of pregnancy, labor was often induced too early. Cæsarean section was an operation for hospitals, not for private practice. At the end of pregnancy, perforation was preferable to Cæsarean section, and with a later conception the timely induction of premature labor.

Prof. Löhlein, of Giessen, did not believe that induction of premature labor and Cæsarean section could come into rivalry, but perforation of the living child and Cæsarean section. Labor should not be artificially induced before the thirty-fifth week. It was indicated in cases of nephritis. One should be cautious about inducing labor in cardiac disease.

Herr Fehling, of Basle, in 70 cases of induced premature labor had had one death, and 80 per cent. of living children. He was therefore in favor of inducing labor. As regarded the methods, he first used iodoform gauze tamponnade, then the colpeurynter, then again the tamponnade; and if these means failed, he allowed the colpeurynter to remain in.

Herr Balandin, of St. Petersburg, pointed out that the main action of means of exciting pains in artificially induced premature labor, depended on septic influences. He preferred induction of premature labor. It was often complicated by feeble pains. A firmly distended uterus responded more readily than a flabby one. Generally speaking the induction of premature labor was free from danger.

Herr Kocks, of Bonn, recommended an instrument devised by himself for the purpose, which dilated vagina and cervix uteri both at the same time.

Mouth of the Infant at Birth.

The *Edinburgh Medical Journal*, November, 1890, contains a paper of unusual interest by Dr. J. W. Ballantyne, upon the anatomy of the head of new-born infants, in which he gives the following description of the oral cavity.

"In all the sections of the heads of infants which I have made, the mouth was seen as a potential cavity, the dorsum linguæ came into contact with the vault of the palate above, and the tongue was in apposition to the inside of the cheeks and gums laterally. In all the specimens, also, the tip of the tongue lay upon the upper surface of the lower gums. It is a fact worthy of note, that even when the mouth is tightly closed the gums do not come into contact. This fact, which is revealed by frozen sections, Symington specially dwells upon as showing that provision exists at birth for a considerable development of the alveolar arches and teeth before the gums of the two jaws can really meet. I have not, however, been able in my cases to show that the distance between the jaws is so great as Symington found it, namely 6 mms., for in the specimens examined it measured from 2 to 4 mms., and in one case the jaws were in contact. Another peculiarity about the buccal cavity in the new-born infant is the fact that the lower jaw lies in a plane posterior to that of the upper jaw. In a sagittal vertical section of the head, the anterior surface of the lower jaw is seen to lie in the same vertical plane as the posterior surface

of the upper jaw. As life advances the jaws come into line with each other, and with the development of the teeth the space between the gums disappears.

"If the tip of the tongue be raised in the case of the new-born infant, two folds of the mucous membrane are seen, one of which, the larger and outer, has a dentated margin, and is called the plica fimbriata; the other, which is smaller and is situated nearer to the middle line and the frenum, is known as the plica sublingualis. In one of my cases there was found under the tongue on the right side a congenital ranula which contained a small quantity of clear limpid fluid.

"H. Ranke has in a recent paper (Ein Saugpolster in der menschlichen Backe, *Virch. Arch.*, Bd. xcvii, pp. 527–547) drawn special attention to pads of adipose tissue which exist in the cheeks of new-born infants, and which are, as Symington shows, present also in the child. Ranke was led to the study of these bodies by the fact that in a child one year old, in a state of great emaciation from continued diarrhœa, the cheeks presented a swollen appearance. This swelling he found to be due to the presence of a distinctly encapsulated mass of adipose tissue, the so-called sucking pad (Saugpolster). He made sections of the face, coronal and horizontal, in the new-born infant, and also dissections from the skin surface inwards, and found that these pads were distinct structures which were not continuous with the subcutaneous adipose tissue. In several of my sections the relations of these pads could be seen, and they were always easily differentiated from the surrounding fat from the fact that on putting the sections into spirit the pads changed their color slightly, and shrank from the adjacent tissues in one case to the extent of being easily removable. Each pad lies in the neighborhood of the duct of the parotid gland, upon the buccinator and partly upon the masseter muscle, and has superficial to it the musculus risorius of Santorini. An offshoot from the pad passes into the spheno-palatine and zygomatic fossæ. Each has a vertical diameter of about 2 ctms., a transverse of about 1.5 ctm., and an antero-posterior of a little over 1 ctm. They are found not only in the infant but also in the child and adult, and are present even when the adipose tissue in other parts of the body is extremely small in amount. They are no doubt connected physiologically with the act of sucking, hence the name of sucking cushion given to them, and probably act by distributing equally the atmospheric pressure, and preventing the drawing inwards of the buccinator muscle between the gums during the efforts of suction when a vacuum is created in the buccal cavity."

Medical Training and the Languages.

In a recent address before one of the largest medical associations in the United States, the speaker argued that the medical student's work should begin with his academic life; that the selection of a career in medicine being determined upon, attention should be given to the cultivation of the mind in the study of Latin, Greek, German, French, physics, etc., to the exclusion of the higher mathematics. Every one admits that a knowledge of Latin is essential to intelligent medical training, and when one is reminded that practically one-half the words in Dunglison's *Medical Dictionary* are of Greek origin, it is not difficult to become convinced that this *dead* language is equally essential. As far as medicine is concerned, nothing can be more deplorable than the decline of Greek in the classical curriculum. In Hungary, according to a recent letter in the New York *Times*, it has been abolished, while in Italy it is treated as an optional aid to philology. The importance of German and French may be appreciated when it is estimated that about one-half of current medical literature appears in these languages.—*Harper's Weekly.*

Santoninoxime as a Vermifuge.

The *Journal de Médicine*, November 9, 1890, says that santoninoxime, according to the *Répertoire de Pharmacie*, 1890, is obtained by heating five parts of santonin with four parts of chlorhydrate of hydroxylamine and from three to four parts of chalk, in the presence of alcohol. The product is eighty for each one hundred parts by weight of santonin employed. The substance consists of silky needle-like crystals, white, insoluble in cold water, sparingly soluble in boiling water, soluble in alcohol and acetic acid. The crystals melt at 216° C. (420° Fahr.), and rotates polarized light to the left. It has been praised as a vermifuge, and may be used instead of santonin. It can be administered in doses two or three times larger than the latter substance without causing accident.

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The Editor will be glad to get medical news, but it is important that brevity and actual interest shall characterize communications intended for publication.

DISTURBANCES OF EJACULATION.

Affections of the male sexual organs, which involve, or appear to involve, the generating power of the patient, are frequently extremely difficult to treat. The cause of this is perhaps oftener to be sought in the patient himself than in the local disorder; in other words, the trouble is with the mind and general nervous system rather than with the sexual apparatus. If a man gets an idea that, as the result of spermatorrhœa, or gleet, or premature ejaculation, or some other disorder, he is impotent or sterile, it requires all the authority and tact of a wise physician to accomplish much towards his restoration to health. Confidence in the attending physician is all important. If the patient can be brought to leave the thinking about his case to be done by his physician, and get rid of his morbid self-contemplation, half the battle is won.

Quacks and physicians with more reputation than character have done much to exaggerate the significance of sexual disorders, and even those who can have no object in deceiving have spoken with unwarranted positiveness in regard to these matters. Thus Alfons Hanc, of Vienna, in an article published in the *Allg. Wiener med. Zeitung*, No. 29, 1890, declares that "a well-timed successful ejaculation of human semen is without doubt the most essential element of the act of copulation, and is almost as a rule a *conditio sine qua non* of the generating power in man." As regards the latter part of this statement, it should be remembered that the spermatozoa alone are the essential elements, so far as the man is concerned, of fecundation. These retain their motion for at least twelve hours outside the body, when the semen is kept in a test-tube, and in all probability live for several days in the secretions of a healthy vagina. There is some reason to believe, it is true, that at the height of the sexual orgasm the mouth of the womb opens, and perhaps even at such times the semen is sucked up into the womb. But the normal os that will admit a sound will certainly admit active spermatozoa at any time, and if so, what is to prevent the fecundation of an egg, if one is present? The statement of Hanc is too sweeping, and needs qualification. Coitus with ejaculation at the height of the orgasm is possible to sterile men, that is to say, men whose semen contains no spermatozoa, or only dead ones; and, on the other hand, men with varying degrees of impotence, but with living spermatozoa in their semen, are capable of begetting children.

It is quite true that perfect coitus implies successful ejaculation at the proper time, but it does not follow that without it there can, as a rule, be no fecundation. There are unquestionably distinct departures from normal ejaculation: it may occur too

soon or too late; it may occur very slowly and in drops, instead of in a jet; or it may be absent altogether. Ejaculation may be complete but be painful, or free from pleasurable sensation. Disturbance may arise also from the effect of alcohol or nicotine. But it is a great mistake to believe that these abnormalities necessarily preclude paternity. Moreover, our own belief will be reflected in the treatment of patients. Probably the most frequent abnormality of ejaculation is marked by precipitancy. There is an erection, more or less complete, and sexual desire, but before the act of coitus is completed, and sometimes before intromission of the penis, ejaculation occurs and the penis becomes flaccid. Such patients have a hypersensitive prostatic urethra, with relaxation and perhaps dilatation of the orifices of the ejaculatory ducts. They require local and systemic treatment, a considerable degree of continence, and afterwards the assurance that if they proceed with greater deliberation and less excitement and without previous dallying, coitus will be performed much more satisfactorily. If their semen contains normal living spermatozoa, they can be told with safety that there is no reason on their part why conception cannot occur. If, on the contrary, we believe that perfect coitus is almost essential to fecundation, we shall grapple with the affections in question with much less hopefulness, and the degree of hope and confidence with which we can inspire the patient will be far less. The consequence will be lack of success in treatment.

FUGU POISON.

The nature and effects of the poison of the Japanese fish, the fugu (pronounced *fungu*), have been generally overlooked by modern toxicologists, and it is only recently that they have received careful scientific study. A report of the investigations of Drs. Takahashi and Inoko, regarding fugu poison, appears in the *Deutsche Medicinal Zeitung*, July 3, 1890.

The fugu is a species of tetrodon. It is a scaleless fish, averaging about a foot in length; with a short head, a thick, round body and a spotted back. It is found principally on the west coast of Japan. Regarding the poison, Drs. Takahashi and Inoko have found that it lowers the respiration and causes its cessation, without giving rise to convulsions. In mammals the heart is not directly affected, and continues to beat for some time after the respiration has ceased. The pulse is gradually slowed; the blood pressure is lowered, and the vaso-motor centre is paralyzed, but not the peripheral vascular nerves. The cardiac inhibitory action of the vagus is at first lessened, and finally is lost. The respiratory centre is paralyzed, and convulsions cannot occur. The excitability of the peripheral motor nerve ends decreases, in mammals, and can be entirely lost in frogs. In frogs the spinal cord is paralyzed. The cause of death is evidently paralysis of the respiratory and vascular nerve centres. The effect of fugu poison upon the motor nerves is similar to that produced by curare, but the fugu poison differs from the latter in that it paralyzes also other nerve centres in the medulla oblongata.

The fugu poison is contained in the living fish, and is therefore not a product of decomposition. The poison produces no toxic effects upon fishes of the same species. Drs. Takahashi and Inoko do not state in what part of fish the poison is found. According to the belief of the Japanese fishermen the meat of the fish is entirely innoxious, the poison being contained only in the liver and gall-bladder. If these organs be removed without being broken, and without the contents of the gall-bladder coming in contact with the meat, the fish may be eaten with impunity. It is considered to have a most delicate flavor; and as many fishermen persist in eating the fish in spite of the risk, cases of poisoning are not infrequently met with. The poison is considered to be always fatal in its effects. It is soluble in

water, but very slightly so in alcohol; and it is insoluble in ether, chloroform, benzine or amyl-alcohol. It is not precipitated by acetate of lead or by any alkaloid reagents. The poison is differentiable and not changed by boiling for a short time.

From these facts the investigators conclude that fugu poison is neither a ferment, an albuminoid nor an organic base. Its chemical composition is still under investigation. Personal experience with a fatal case of fugu poisoning confirms the assertions of Takahashi and Inoko regarding the symptoms of poisoning. The case in question was that of a strong fisherman, about thirty years old. An hour before he had eaten fugu, which was supposed to have been well cleaned. When seen, he was lying upon the beach in a semi-conscious condition. The pulse was slow but strong. Respiration was greatly embarrassed; breath was taken with great difficulty and in gasps. The chest heaved violently, and the man was in a cold perspiration. Such restoratives which were at hand were resorted to, and an attempt to induce vomiting made, but in vain. Within half an hour the man was dead.

AN INSTRUCTOR IN ABORTION.

From points in the United States a thousand miles apart the Editor of the REPORTER has had sent to him, with the suggestion that it be made the subject of comment in these columns, a pamphlet, which has every appearance of deserving the severest censure. The author of the pamphlet is one whose business it is probably not best to advertise by giving his name. His pamphlet offers for sale a translation of a book by Velpeau, in which, as he states with well-chosen expressions, instructions may be found how to produce abortion in a variety of ways, some of which are "not known to the medical world," and also "valuable hints as to the best means by which evasion of the law can be accomplished when a physician is so unfortunate as to be 'suspected' of having been guilty of this step." He also says: "I don't know that the author intended it for a lesson when he explained how abortionists scientifically bleed their patients; be that as it may, he certainly lays bare the road to a fortune for any one desiring to follow this questionable practice."

Our correspondents evidently think this pamphlet a cunningly-devised scheme for securing purchasers of a book of instruction in a practice scorned by decent men and condemned by moral men both in and out of the medical profession. This opinion seems reasonable to us; and we hope, if the seller of it be the scoundrel that he may be suspected of being, that a way may be found to bring him to justice.

At any rate, we are glad to have evidence that readers of the REPORTER turn to it for sympathy and assistance in exposing wrongdoing; and we assure them that they will always have both. An experience of nearly four years has demonstrated the fact that infallibility does not fall upon one's shoulders with the editorial mantle; but an honest purpose to do right and to hate evil every one may hope to have—and hope also that it will make up for some errors of judgment.

A PHILADELPHIAN'S DEATH UNDER THE KOCH TREATMENT.

Rudolph Long, about 25 years old, of 2637 North Ninth street, this city, recently went to Berlin to place himself under Prof. Koch's treatment for the cure of consumption. On Monday morning, December 15, the family received a letter from their son telling them that he had succeeded in obtaining admission into the hospital and was receiving treatment. On December 16 we received information that the man had died on December 14.

As far as we know this is the only patient who went to Berlin from this city for Koch's treatment. The case was not an advanced one of tuberculosis, although the symptoms were well marked.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained upon receipt of price, from the office of the REPORTER.]

EPILEPSY: ITS PATHOLOGY AND TREATMENT. By HOBART AMORY HARE, M. D., B. Sc., Clinical Professor of the Diseases of Children and Demonstrator of Therapeutics in the University of Pennsylvania, etc. Small 8vo, pp. 228. Philadelphia and London: F. A. Davis, 1890. Price, $1.25.

This volume is No. 7 in the Physicians' and Students' Ready Reference Series, and is the essay for which a prize of four thousand francs was awarded to Dr. Hare by the Royal Academy of Medicine of Belgium, December 31, 1889.

The author records and appears to adopt the view developed especially by Hughlings-Jackson, Ferrier and Horsley, that epilepsy arises from a disturbance in the cerebral cortex. As to treatment, the book reports nothing new, so far as the use of medicines is concerned. Dr. Hare thinks the bromides the best general remedies, but speaks as though antifebrin might be of service.

The essay is an interesting review of the knowledge of epilepsy, past and present, especially from a physiological and pathological point of view, but it is a sad commentary on the state of knowledge in regard to it, that the profession should still be so powerless to combat it successfully.

TRANSACTIONS OF THE ASSOCIATION OF AMERICAN PHYSICIANS. Fifth Session, held at Washington, D. C., May 13, 14 and 15, 1890. Volume V. 8vo, pp. xxiv, 275. Philadelphia: Printed for the Association, 1890.

The present volume contains nineteen papers on medical subjects, all of them of a high degree of excellence. We desire to refer particularly to the paper of Dr. William T. Lusk on "Antisepsis in Midwifery," because it is a late utterance by a recognized authority on obstetrical procedures, and because of the importance of its teaching. After speaking of the great lessening in the mortality and morbidity from puerperal diseases which has followed the employment of antisepsis in labor cases, he details the method used in Bellevue Hospital. This consists essentially in preventing anything septic from getting in range of the woman. During child-bed no vaginal douches are given—they are given before it. The following sentence merits quotation: "The occasional appearance on the scene of an individual who uses his 'common-sense'—*i. e.*, one who does not believe there is any harm in witnessing an autopsy, or in visiting a companion in the erysipelas ward, or in holding the pus basin in an operation for pyothorax—is almost certainly followed by temperature elevations, which add fresh testimony to the efficacy of a rigid observance of antiseptic regulations." True midwifery antisepsis, Dr. Lusk says, "consists not so much in douching as in furthering physiological processes. Under normal circumstances a proper handling of the patient in the third stage of labor will effect more in the way of prophylaxis than Niagara. When, however, hands or instruments are introduced into the uterine cavity, the case is different. It would be hardihood then not to precede the operative measure by thorough vaginal disinfection." Dr. Lusk believes in the employment of the douche in fevers resulting from the absorption of toxine due to the putrefaction of clots, membranes and bits of placenta within the uterus; but he says it is to be remembered that this is a clumsy attempt to remedy the results of past remissness and that his own opinion is that the intra-uterine douche in child-bed is not indicated except when there has been slovenly help rendered by the attendant at the time of child-birth.

When the douche is to be used, Dr. Lusk employs first a vaginal douche, and, for intra-uterine injection, bichloride solution of a strength of 1 to 3,000, injecting not more than a quart. After the douche, he strongly recommends the introduction of an iodoform pencil containing two and one-half drachms of iodoform.

These quotations indicate sufficiently, without further comment, the thoroughly defensible position occupied by Dr. Lusk on the question of antiseptic midwifery. In most cases it is necessary because there has been neglect in keeping the woman and her surroundings in an aseptic condition.

A DICTIONARY OF PRACTICAL MEDICINE BY VARIOUS WRITERS. Edited by JAMES KINGSTON FOWLER, M. A., M. D., Fellow of the Royal College of Physicians, etc. 8vo, pp. xxvi, 942. Philadelphia: P. Blakiston, Son & Co., 1890. Price, Cloth, $5.00. Half Morocco, $6.00.

This is a dictionary and a concise treatise on the practice of medicine in one. Authors of well-known reputation have contributed the descriptions and written the articles upon subjects with which they are familiar. The result has been the production of a book of a high order of excellence. It is impossible in our space to review such a book and do full justice to it. One feature of it, however, is deserving of special mention: when diseases are treated of, the symptoms, diagnosis, pathology and treatment are all given. This makes the dictionary very much more valuable for students, while it is easy for those who do not desire to study any particular part to skip it. We can cordially commend the book to our readers as trustworthy and well up to the times.

PASTEUR AND RABIES. By THOMAS M. DOLAN, M. D., F. R. C. S., Edin., author of *The Nature and Treatment of Hydrophobia*, etc. Small 8vo, pp. ix, 83. London: George Bell & Sons, 1890.

Some one has said that nothing lies like facts, unless it be figures. In looking over this little brochure the conclusion is inevitable that some one is guilty of wilful deception, or else belongs to the class of persons once wittily described by Sir James Paget, as those "who would not for their lives tell a lie, yet who all their lives have been utterly unable to tell the exact truth." Dr. Dolan is an opponent of Pasteur and of anti-rabic inoculations. In his preface he quotes a letter received from Prof. Peter, of Paris, who declares that the mortality from hydrophobia in France has increased since Pasteur began his work, and that the latter is in the position of a physician who, when consulted by a patient with small-pox, should insert a second dose of the variolous poison in order to subdue the force of the first. The report of Dujardin-Beaumetz in his capacity of Health Officer in the Department of the Seine, shows that from 1882 to 1885, the four years before Pasteur's method was employed, the number of deaths in Paris was 38, while in the following four years, under his method, it was 37. Dujardin-Beaumetz ends his report by saying: "As Pasteur's treatment does not prevent the persistence of hydrophobia, we must still depend upon . . . the killing of

every dog which has been bitten by a rabid animal." Dr. Dolan tabulates 90 cases of death after treatment by Pasteur, in France, from November 1, 1885, to November 30, 1889.

It is evident from his book and from the opinions of others whom he quotes, that the day is passed when statistical statements emanating from Pasteur and his Institute will be accepted without close scrutiny, to see in how much they bear the construction put upon them and in how much they are consciously or unconsciously misconstrued.

New Remedies and Appliances.

[In this department, notice will be given of Remedies, Food Articles, and Instruments or Surgical Appliances of which specimens are sent to the Editor; it will bear the same relation to these articles that the department of Book Reviews now does to books.]

Pavara Pills.

A specimen vial of Pavara pills, sent here by C. L. Topliff, of New York, contains a lot of oblong, gelatin-coated pills which are, as the label states, tasteless—that is, if soon swallowed; although the solubility of the coating is shown by the promptness with which the moderate bitterness of the ingredients is perceived if one of the pills is held in the mouth for a few seconds.

These pills have in our observation—which antedates considerably the receipt of the specimens—fully justified the claim of the manufacturer that they are both efficient and pleasant in the treatment of constipation, and we feel that it is safe to expect others who prescribe them to be well satisfied with their effects.

Correspondence.

What shall we do with our Pelvic Inflammatory Cases?

To the Editor.

Sir: Dr. Anna M. Fullerton has recently contributed a second paper to this subject in the *Annals of Gynecology*, for November, 1890, the first paper having appeared in the Medical and Surgical Reporter, August 16, 1890. In both papers Dr. Fullerton quotes liberally from my writings and statements respecting the value of electricity in chronic pelvic inflammations; and, though I am preparing for publication a careful review of this subject, with abundant proof, it is necessary for me to point out at once the inherent weakness of the conclusions of her second paper, which were reproduced in your last number.

As an apparent basis for her conclusions, the paper in the *Annals* contained a list of 27 cases of operations for pelvic disease. In this list only five cases had had electrical treatment—presumably of the kind available at the hospital of the Woman's Medical College. Of these five, three were cases of ovarian cysts, in which the use of electricity is universally condemned as useless. Of the other two cases one (No. 1 in the list) appears to have been treated two months with electricity and rest. At the operation "sclerosed" ovaries and inflamed tubes seem to have been removed. This patient did not die from the operation, but there is a singular and most eloquent silence as to its result on the pain of which the patient complained. The other case (No. 17) was one of hemorrhagic fibroma, in which a few treatments were said to have been followed by pelvic peritonitis—which may have been due to the bad technique prevailing in the clinic, as no mention of pus is made.

With one exception, therefore, this list of twenty-seven cases has no bearing whatever on the value of electricity in the diseases for which it has been recommended.

Before dismissing this list it may be of service to look at it more closely. In the series were twenty-three cases of amputation of the uterine appendages. Results: two deaths; twenty-one sexless women; and but two cases in which relief of symptoms after operation is noted. Both of these cases (Nos. 5 and 7), moreover, had other conditions than inflammation present, one being a simple and the other a dermoid cyst of the ovary.

Aside from the charge of ignorance on the part of electro-gynecologists, which Dr. Fullerton prints in cold type, the remainder of both papers is merely the advancement of a plea that abdominal section should always and invariably replace electricity and other conservative measures in the treatment of pelvic diseases, because without section no one can make a diagnosis. If this view were not so frequently expressed just now, it would be regarded as most remarkable. The same procedures among the doctors of the body politic would render courts and juries unnecessary and the one "panacea" of the suspected as well as the real diseases of society would be the hangman.

If electricity is stigmatized as a pretended panacea, what shall universal and purposeless abdominal section be called? Dr. Fullerton's vivisectional experiments lead her to think that any doubtful case may present either a

salpingitis, ovaritis, salpingo-ovaritis, hydro-salpinx, hemato-salpinx, abscess of tube or ovary, small dermoids, extra-uterine pregnancy, etc. I should like to ask if there is not one pathological process and one only underlying all of these conditions, except the last two? Wherever it is situated, the patient is suffering from an inflammation, and the aim of the scientific physician is to subdue it, whether situated on this side or that side of a certain tissue or membrane. Owing to the chemical and vital changes produced in living flesh by the galvanic current, it is a most efficient agent in the promotion of healthy action in sub-acute inflammations, especially when the physical laws governing its transmission permit us to pass a sufficiently dense current through the diseased part. Its very efficiency in arousing dormant tissue vitality contra-indicates its use in the advanced stages with purulent formation—at least unless a free exit to the pus is also arranged for. There is no question of the value of differential diagnosis between simple inflammatory conditions on the one hand and purulent collections and cysts on the other; but to perform a bloody and dangerous operation for the sake of knowing if an inflammation is on the inside or outside of the Fallopian tube is like splitting hairs with an axe. Electricity itself is a valuable means of differentiating these two groups; for, if the symptoms of a case are aggravated by it, the existence of an abscess may be diagnosticated with reasonable certainty. Unless gross carelessness is betrayed, this intensification of the symptoms is but evanescent.

It is idle to speak of "electricity" as dangerous. Any tyro who is capable of bridling this potent agency may practice vaginal applications, though no one but an expert should pass an electrode or anything else within the cavity of the uterus. Electro-punctures and intra-uterine applications demand, like surgery, the possession of skill and experience on the part of operators. As to the prevalence of accidents from the use of electricity, it is notable that no proof of the statement is given by Dr. Fullerton, though it is easy to believe that such results may exist in a hospital in which this work is relegated to unskilled assistants, who are hampered by inadequate facilities and frustrated by a constant drain of the best material to supply the tables of ambitious operators. Electrical work that demands uterine sounding partakes, of course, of the well-known risk of that procedure, though it is my conviction that a mild galvanic current renders a sound less noxious than when the latter is used alone. Fortunately, the use of electricity is not restricted to this method, notwithstanding its usually preponderating efficiency. Danion and Championnière have even advocated a vaginal method in the treatment of fibroids.

It is to be regretted that Dr. Fullerton, in alluding to Dr. Bradford's paper on certain cases treated by me, which appeared in the *Annals of Gynecology*, March, 1890, confined herself to his somewhat ambiguous concluding words. If she turns to the body of the paper, she will find that the notes prepared by Dr. Bradford, with the critical assistance of Dr. J. M. Baldy, showed the following conditions in the cases after a year's interval:

Cured permanently, 5.
Improved permanently, 3.
Improved temporarily, 3.

Such was the verdict agreed upon as to the condition of these desperate cases at the expiration of a year from their original report, the jury consisting of two surgeons and one electrician. Facts thus arrived at are worth mountains of opinions, and I would suggest to Dr. Fullerton the adoption of a similar method of studying the *ultimate* results of the cases she reports.

Dr. Fullerton presents in both papers some observations on the relative value of old maids and ovaries. As to the latter, I beg leave to submit that an unmarried woman is not a competent judge. Until women engaged in rearing families, and more especially their husbands, decide that these organs are useless I shall continue to urge that all means be exhausted before their removal is decided upon; and I think that both common sense and public policy will sustain me.

Yours truly,
G. Betton Massey, M. D.
Philadelphia.

Anencephalous Monster.

To the Editor.

Sir: On October 22, 1890, we were called to attend Mrs. S., who was reported as being in labor for the past twenty-four hours. On examination we found the patient very nervous, with cold feet and hands and very feeble action of the heart. The first stage of labor was not over, and there was a face presentation. On inquiry, we found Mrs. S. to

be 39 years old, a multipara, of nervous temperament, very much emaciated, having suffered pain for three months previous, for which she claimed to have taken four grains of morphia daily. She had taken no morphia for the past two days, thinking it would interfere with the progress of her labor. We gave her some morphia hypodermically and then the labor progressed very rapidly, and terminated in three or four hours under the combined use of morphia and chloroform.

The fetus was a boy, weighing six pounds and fully developed, with the exception of the head, which is sunken between shoulders and has neither forehead nor vertex, the vault of the skull and the brain being entirely absent. The base of the skull was surmounted by a blood tumor. The face was livid and over-developed, and was directed obliquely. The nose was large and flattened, the eyes projecting and the mouth open. The child lived twenty-two hours, during which time it had tonic and clonic convulsions.

The mother attributed the abnormality of her child to seeing a drowning hog, which was taken from the water and its brains knocked out in her presence.

Yours truly,

DRS. LUCAS & PANKAKE.

Alma, Arkansas.

NOTES AND COMMENTS.

Treatment of Enlarged Prostate.

In the *American Journal of the Medical Sciences*, November, 1890, Dr. W. T. Belfield has a paper on "Operations on Enlarged Prostate" in which he says:

An estimate of the value of radical operations must be based upon a comparison with the results of simple drainage of the bladder; since the latter is included in the former and alone secures cessation of existing cystitis, subsidence of the congestive œdema of the prostate, and an improvement —more or less temporary—in the evacuation of the bladder. The radical operation should accomplish more; it should restore voluntary and complete urination in the individual who has long been largely or entirely dependent upon the catheter. For this estimate many of the 133 reported cases are useless; for in some the previous and subsequent history is not recorded; in others the operation was made for acute retention without previous dependence upon the catheter (where simple drainage would have afforded relief); and in a third class the prostatic enlargement was complicated with a calculus, to whose removal the recovery of the vesical function might be largely ascribed. Excluding these, there remain 41 cases wherein the catheter was indispensable for periods varying from several months to seven years prior to operation. In 32 of these 41 voluntary urination was restored and maintained during the period of observation, varying from a few months to two years; in only few is it, however, definitely stated that the evacuation of the bladder was complete as well as voluntary; in several, residual urine was noted and the daily passage of the catheter was advised as a precautionary measure. In 9 of the 41 cases voluntary micturition was not restored. As elsewhere observed, it seems probable that the failure in some of these was due to incompleteness of operation.

The abstract utility of prostatectomy is as yet clinically restricted by the fact that so many patients requiring the operation are, when they reach the surgeon, too feeble to endure it. For this reason Dr. Belfield has refused to advise the operation in several cases; he made simple drainage by perineal urethrotomy in five (with one death); and in four others (two fatal), in which the suprapubic incision was imperative for the extraction of a calculus, he declined to interfere with prostatic tumors whose removal presented no mechanical difficulties—simply because the enfeebled condition of the respective patients forbade all operative measures that were not absolutely necessary for immediate relief. In time patients will be educated to the knowledge that danger lies not in the operation but in the delay whereby the urinary organs are disorganized.

The various operations mentioned represent as many stages in the development of surgical conceptions as to the nature and accessibility of the prostatic obstacle. The operations of Mercier and Bottini may, doubtless, by a happy chance, secure occasionally complete success, though inapplicable to most cases; perineal incision and excision of prostatic obstructions have a wider range of usefulness, seriously restricted, however, by the mechanical difficulties in the detection and removal of the common intra-vesical growths; supra-pubic cystotomy affords satisfactory access to these frequent tumors, but sometimes fails to clear

the obstructed urethra; the combined supra-pubic and perineal approach seems alone to fulfil every indication in every case. There is, therefore, from the anatomical standpoint, no choice of operation; supra-pubic cystotomy, with or without a supplementary *boutonnière*, as the peculiarities of the prostate in a given case may require, is in the abstract *the* operation. Yet the interests of the patient will, doubtless, sometimes be better served by a compromise with the requirements of his prostate; perineal prostatotomy is perfectly free from anatomical dangers, and, because so quickly completed, involves less peril from the anæsthetic. It is, therefore, safer (mortality 9 per cent. against 16 per cent. by supra-pubic prostatectomy); it affords temporary relief in all cases and a radical cure in a fair minority—for which reasons it should, in the writer's opinion, be the operation of choice in feeble patients.

As to the technique of supra-pubic cystotomy, the Petersen rectal bag has been quite largely abandoned and the modified Trendelenburg position adopted for eliminating the peritoneal fold from the field of operation. The transverse incision of the soft parts and Helferich's partial resection of the symphysis seem to be regarded as unnecessary features. The extreme distention of the bladder, formerly considered an essential safeguard, is no longer practiced, since with the patient in the inclined posture an almost empty bladder can be opened with safety.

An important advance in the removal of prostatic obstruction is the enucleation of all accessible masses in the substance of the organ instead of a simple levelling off of projecting tumors with scissors or cautery; by this means not only the salient middle lobes, but also the no less obstructing, though less obtrusive lateral enlargements, are easily removable. This process of enucleation obviates the necessity for the operation suggested by Dittel, under the title of "lateral prostatectomy."[1] After emphasizing the importance of the neglected lateral lobes in the induction of retention, and criticising Harrison's plan of treating them by prolonged pressure as inefficient, Dittel shows that they can be reached by separation of the rectum from the prostate; and by operation upon a cadaver with lateral enlargement of the prostate, he proved that the excision of portions of the lateral lobes from the rear—without opening the bladder—relieved the prostatic obstruction by permitting the vesical surfaces of these lobes to fall apart. He admits that supra-pubic cystotomy would also often be necessary for the removal of intra-vesical obstacles; and that the two operations, even if separated by an interval of weeks, would rarely be sustained by the same subject until patients are educated to submitting to them at an early stage of prostatic disease.

Dittel makes no allusion to the fact that the lateral lobes can be and have repeatedly been removed by enucleation after supra-pubic cystotomy. Of the several surgeons who have independently adopted this measure McGill deserves especial mention; in several instances he has enucleated lateral masses weighing from one-half to two ounces. The ingenious operation suggested by Dittel seems, therefore, to have been anticipated by a much simpler, safer and more practicable means of attaining the same end.

Prolonged retention of a tube in the perineal wound, as advised by Harrison, has been attended in his and other hands with one unpleasant result—the persistence of a permanent and obstinate fistula.

Wishard, of Indianapolis, has successfully practiced a means for obviating this objectionable sequel: When the tube is finally removed he curettes the granulating surfaces, incises the anterior and posterior angles, and closes the entire wound by sutures, drawing the urine by catheter for several days. By this means he secured immediate and complete union after drainage for periods up to eighty-one days.

[1] *Wiener med. Woch.*, No. 19, 1890.

Castration for Mollities Ossium.

The *British Medical Journal*, Nov. 1, 1890, says editorially:

Of all the more serious impediments to labor, none can be graver than the pelvic deformity produced by mollities. The disease itself is most distressing over and above its ill effects on the genital canal. No doubt as far as fatality is concerned, it is as bad to die after labor delayed through rickety deformity as to perish in the same manner when mollities is the source of pelvic malformation. A rickety pelvis, however, causes little trouble except during labor. It is not incompatible with health, strength and beauty. Mollities, on the other hand,

always involves impaired health, it also cripples and disfigures the unhappy patient. Rickets cannot be made worse by pregnancy. Mollities, on the other hand, is not only aggravated by gestation, but tends to advance at each menstrual period. This fact, associated with the now frequent practice of removal of the appendages for chronic inflammatory disease, has set authorities thinking about the justifiability of that practice for the cure or check of mollities. To remove the ovaries lest a woman should bear more children is in any case questionable and under many circumstances almost criminal. To remove them in order to check a grave disease seems, on the other hand, quite justifiable. The practice entails sterility, but not as a direct aim; barrenness is simply an inevitable result as after double ovariotomy.

Drs. Fehling and Truzzi have carried these principles into practice and each of these obstetricians communicated the results of their practice to the Section of Obstetrics at the Berlin meeting of the International Medical Congress last August. Fehling, of Basel, has removed the ovaries nine times with the object of remedying mollities. The first operation was performed nearly four years ago. Eight of the cases recovered, and the progress of the disease was checked. One died from obstruction, through adhesion of the intestine to the uterus which had been fixed to the parietes—a warning, by the way, to those who practice hysterorrhaphy. Truzzi, of Milan, has operated twice, both patients recovering. The second case was non-puerperal; it is noteworthy that though the ovaries appeared healthy, a small sarcomatous area was found in the left, which was slightly enlarged. Fehling noticed unusual vascularity of the appendages in his cases, the arteries being enlarged as well as the veins. He found no characteristic miscroscopic changes in the ovaries. He noted a marked aggravation of the symptoms at each menstrual period, as a distinct feature in the previous histories of his patients. The steady diminution and ultimate cessation of the characteristic pains in the bones was one of the most satisfactory results of operation. Women with mollities are, as a rule, prolific; Dr. Fehling considers that this fact indicates abnormal activity of the ovarian functions. Still, the disease has been known to progress for many years in women who bore no children during that space of time; some cases of the kind were operated upon by Dr. Fehling, with the result that the mollities ceased to progress. That authority believes that the ovaries exert a reflex action on the vaso-dilators of the vessels of the bones, causing passive hyperemia followed by active absorption of the bone salts. Removal of the ovaries removes the exciting cause, so that the disease makes no further advance. It cannot be denied that Drs. Truzzi and Fehling have justified their bold proceeding, and the practice of excision of the ovaries for mollities ossium bids fair to become an established operation. Fortunately, opportunities for performing it will be rare in this country, the disease being very infrequent in the British Isles.

Operation for Cleft Palate.

Mr. Davies-Colley, Surgeon to Guy's Hospital, has published in the *British Medical Journal*, October 25, 1890, an interesting and well illustrated paper, in which he describes an operation for cleft in the hard palate, for which he makes the following claims.

1. There is less hemorrhage, for on the one side of the palate very few vessels are wounded, while on the other side the incision does not extend as far back as the foramen for the large descending palatine artery; and in dissecting back the triangular flap, it should be remembered that all the vessels which are divided are exposed to view, so that their orifices can be readily compressed by the sponge.

2. The parts can be cleanly dissected back, without so much bruising as is necessary in the ordinary operation.

3. Nothing is cut away.

4. There is very little tension after the operation. The flap lies loosely in its position, so loosely that I have often had misgivings that it would not unite; and as there is no pull upon the sutures they do not ulcerate through, and may be left for five or six weeks after the operation. This gives an opportunity for the flap to unite by granulations if union by the first intention has failed.

5. He has never observed any tendency to sloughing in the flap.

6. The upward pressure of the tongue, which so often causes separation of the flaps when the ordinary operation has been performed, especially in young children, is here beneficial. When the mouth is closed it acts as a splint to keep the flap in its proper

position, and press it firmly against the raw surface upon the other side.

7. The bridge is a very strong one, consisting as it does of two layers of muco-periosteum united by their raw surfaces.

8. This operation can be performed with success at a much earlier period than the ordinary operation. It is easy by these means to firmly unite clefts of the hard palate in infants between the age of one and two years. This is a great advantage, not only with respect to the mastication of food and the learning to talk, but also in diminishing the deformity of the face, the broadening of the bridge of the nose and the separation of the cheek bones, which are so often noticed in these patients.

Mr. Davies-Colley says the disadvantages of this method are: (1) the hard palate alone is united; (2) a foramen is generally left at the front part of the cleft. This, however, either tends to disappear, or can be closed in later life.

He has endeavored to unite the sides of the soft palate at the same time, but without success. On the other hand, it should be remembered that by securing a firm union of this kind in early life between the palatal processes of the superior maxillæ and palate bone the sides of the cleft in the soft palate are approximated, and that they may be easily united a few months later. In the young children upon whom he has operated he has found considerable difficulty in subsequently uniting the front part of the cleft of the soft palate, while the posterior two-thirds or three-fourths are readily brought together. In two patients over the age of 12 he found no difficulty in closing the gap thus left.

In conclusion, Mr. Davies-Colley strongly recommends this operation for the consideration of surgeons: 1. In the cleft palate of infants. 2. In patients on whom the ordinary operation for cleft of the hard palate has failed. 3. Where the separation of the sides of the hard palate is too great to be bridged over by the ordinary operation.

Caustic Lime for Purification of Sewage Water.

The *Engineer and Building Record*, November 15, 1890, says:

Dr. H. Weigmann, of Kiel, Germany, contributes to the *Gesundheits-Ingenieur* an interesting article on the above subject. In the pamphlet of foreign abstracts of the British Institution of Civil Engineers, the following resumé of it is given. While admitting that the purification of sewage water by means of irrigation is the more perfect system of treatment, Dr. Weigmann points out that in certain cases some chemical process has, for various reasons to be employed. Notwithstanding the numerous substances which have been proposed, lime still holds the foremost place. The caustic lime combining with the carbonic-acid gas, a product of decomposition always present in sewage water, yields a bulky precipitate of calcic carbonate, which mechanically entangles the suspended impurities and effects a rapid clarification.

Recent experiments respecting the action of lime have shown this substance to possess such excellent disinfecting properties that it seems that the lime treatment is among the best of the precipitation processes. As one result of the use of lime, it is pointed out that the substances in solution are thereby invariably increased rather than diminished in quantity, though the recent researches of Schreib tend to controvert this theory. In order to arrive at accurate conclusions, careful estimations of the amount of chlorine in the sample, both before and after treatment, are advisable. Dr. Weigmann's experiments have led to the conclusion that from the clarified effluent after the lime treatment there is a considerable evolution of ammonia and other nitrogeneous gases, and he states that though water which has been rendered so strongly alkaline as to destroy all the bacteria therein cannot decompose so rapidly as water teeming with bacteria (which are the active exciters of putrefactive changes), there can be no doubt that, owing to the dissolved lime, an important change takes place in the condition of the organic substances in solution. Dr. Weigmann insists upon the necessity for a rapid separation of the sludge from the water in order to put an end to the changes which take place in the organic matters entangled with the calcic carbonate, and points to the advantages, on chemical grounds, of passing the sludge through a filter-press, as soon as possible after deposition, as is done, for instance, in the works at Halle.

In addition to its powerful action in destroying the bacteria and germs of every kind, there can be no doubt that lime is a strong disinfectant. The tendency of alkaline sewage water, after it has, by means of carbonic-acid gas in the atmosphere or in the river

water, parted with its dissolved lime, is to become again rapidly charged with bacteria; but these are by the self-purification powers of running water speedily rendered innocuous or converted into the food-stuff of water-plants, and it is pointed out that the previous lime precipitation has removed all the germs of a pathogenic character, and the new growth of bacteria are probably of a non-dangerous character.

Ligation of Uterine Appendages for Hemorrhage from Myoma.

Dr. Michael Beverley reports in the *British Medical Journal*, November 1, 1890, the case of a woman 34 years old admitted to the Norfolk and Norwich Hospital, April 5, 1890, for profuse menorrhagia.

On examination a swelling could be felt externally, about the size of a cricket ball, in the left hypogastric region; it was movable and painful. External examination produced rather profuse loss. A tumor could be felt by vaginal and rectal examination; it moved with the uterus, which admitted the sound to 2½ inches. Diagnosis of uterine fibroma was made. The patient, who was anemic and weak, complained of bearing down, and some difficulty in defecation. She had been twice married and had had one child and several miscarriages. Her second husband died twelve months before her admission, so that she had to earn her own living. This had been lately impossible owing to constant uterine hemorrhage.

At a consultation of the staff Dr. Beverley proposed removal of the appendages; this was assented to, and was attempted April 30. The ovaries were, however, found to be so firmly bound down by adhesions within the pelvis that their removal appeared to be almost impracticable; consequently the operator raised the uterus partly out of the abdominal incision, and applied two ligatures round the Fallopian tube and broad ligaments on each side, close to the uterus, and divided the tubes between the ligatures. The operation was performed under the carbolic spray.

The patient made a rapid and uninterrupted recovery. Her only complaint fter the operation was pelvic pain, which required the use of hypodermic injections of morphine to allay it. The temperature chart was very even, 99.50° F., being the maximum. There was no uterine hemorrhage nor discharge after the operation; and she left the hospital quite well, on May 24, twenty-four days after the operation. Her medical adviser, Mr. Shann, of Lowestoft, informed Dr. Beverley, in July, that up to that date she had had no recurrence of her symptoms and remained well.

This case is recorded for the purpose of eliciting an expression of opinion, for future guidance, under similar circumstances. Removal of the appendages for the arrest of uterine hemorrhage in fibromyomata of that organ is now become a recognized mode of treatment (in otherwise suitable cases). In most provincial hospitals, every now and then, must occur cases similar to this now recorded, in which the removal of the ovaries appears to be almost impracticable to the ordinary hospital surgeon. What in these cases do the specialists recommend? Are the ovaries to be pursued to their hiding places and shelled out of their nests? or is it sufficient to ligature the tubes as I elected to do in my case? And, if so, what will become of the cut off ovaries; and what chances has the patient of ultimate cure?

Double Uterus and Vagina.

In the *Bolnitchnaia Gazeta Botkina*, No. 42, 1890, p. 986, Dr. Vladimïr A. Vasten, of St. Petersburg, publishes an account of a rare and interesting case of double uterus and divided vagina, in which a surgical interference became necessary.

A merchant applied to the writer with complaints of his wife being sterile and incapable of sexual intercourse. The patient, a somewhat anemic and thin, but regularly-made woman, twenty-five years old, had begun to menstruate after her sixteenth year. The catamenia recurred regularly every four weeks, and lasting three or four days, but were always accompanied by abdominal pain and of late by hysterical fits. She had married at eighteen, any attempt at coition proving invariably unsuccessful and exceedingly painful. On examination, the external genitals were found to be developed quite unusually; but the vagina was double, being divided by a septum one-half inch thick from the vaginal inlet up to the fornix. A portion of the partition below was detached from the posterior vaginal wall at the distance of three centimeters. It had been torn off during initial attempts at sexual intercourse, the woman having had profuse hemorrhage for the first three months of her marital life. The vaginæ had a normal

length, but were rather narrow, the introduction of a Ferguson speculum two and one-fourth centimeters in diameter causing pain. In each vagina there was present a small-sized uterine cervix with a very narrow circular external os, discharging an abundant viscid and turbid mucus, the uterine bodies deviating laterally at the level of the inner os, the left womb measuring eight and the right eight and one-half centimeters in length. As repeated examination showed, the wombs were menstruating simultaneously and equally abundantly. Both the husband and wife expressing an ardent wish to get rid of dyspareunia and to improve the chances of conception, Dr. Vasten excised the whole septum, except a small crescent-shaped flap between the cervices, and closed the wounds with interrupted silk sutures. Hemorrhage was but trifling. For a day the patient had obstinate vomiting, but otherwise the after-course was most satisfactory. On the ninth day the woman got up; on the tenth the sutures were removed, the wounds healing by first intention, except a small area, which suppurated. On the fourteenth the woman was discharged quite well. When seen some while afterwards, she was in high spirits; coition and the catamenia had become normal and the hysterical fits had ceased to occur.

Dr. Vasten adds that this is a third case of double womb and vagina, seen by him during the last twenty years. None of the patients were aware of the defect, notwithstanding their having been previously examined by various gynecologists. On the whole, Dr. Vasten believes that the anomaly in question occurs far more commonly than is usually supposed.

Tea a Cause of Cold Feet.

Mr. Hutchinson says in the *Archives of Surgery*, July, 1890, that he once advised a lady to drink more tea. "I cannot touch it," was her reply. "It makes my feet icy-cold, and wet with cold perspiration." On further inquiry, she assured Mr. Hutchinson that she was quite certain of her facts, and had often tested them. She thought that the perspiration was usually of the soles chiefly. Her hands were, she thought, also made cold, but not so definitely as her feet. Mr. Hutchinson says he had long been familiar with the fact that tea made the feet cold, but did not know that cold perspiration attended it. It does not do so in all persons. The coldness is caused, he believes, by contraction of the arteries, for the feet at the same time shrink. Alcohol has usually a precisely opposite effect.

Elder Bark as a Diuretic.

The *Chemist and Druggist*, November 8, 1890, says that flowers, fruit and bark of the elder-tree (*Sambucus nigra*) have had a reputation from a very early time for their diuretic properties, but for many years they have been little used. Recently, however, several Continental physicians have been experimenting with the fresh inner bark in chronic Bright's disease, acute nephritis, and other complaints, using a sweetened decoction of the drug. In most cases there was distinct improvement, and the diuresis produced was copious.

RESOLUTIONS.

IN MEMORY OF RICHARD J. LEVIS, M. D.

At a meeting of the Faculty of the Philadelphia Polyclinic and College for Graduates of Medicine, the following preamble and resolutions were unanimously adopted.

WHEREAS, The Divine Ruler of the universe has seen fit to remove from among us Dr. Richard J. Levis, our friend and colleague; therefore be it

Resolved: That not only in the Emeritus Professor of Surgery of the Philadelphia Polyclinic, but the whole medical profession has lost an honored and faithful co-laborer; and the community has cause to mourn a skilful and learned physician and honest and sympathizing friend.

Resolved: That by his kindness of manner, by the thoughtful interest which he always manifested in the younger members of the profession, by his encouragement, his earnestness and his example, he had endeared himself to all, and that we fitly honor and cherish his memory. We must emulate his zeal and vie with each other in carrying forward the great work in which he was so ardently engaged.

Resolved: That we tender to his family, in this sad hour of affliction, our heart-felt sympathy.

Resolved: That these resolutions be handed to the family of our beloved colleague and to the medical journals.

(Signed) THOS. J. MAYS, *President*,
S. SOLIS-COHEN, *Secretary*.